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MINISTRY OF PUBLIC HEALTH, EGYPT

ANNUAL REPORT

ON THE WORK OF THE

Ministry of Public Health

for the Year 1946

Government Press, Cairo 1953.

GOVERNMENT PUBLICATIONS are on sale at the "Sale Room"
Ministry of Finance. Correspondence relating to these
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MINISTRY OF PUBLIC HEALTH

ANNUAL REPORT FOR THE YEAR 1946

Part I.—PUBLIC HEALTH

Chapter I.—VITAL STATISTICS

A.—Population.

The population of Egypt as estimated in mid year 1946 was 18,143,100 inhabitants as against 17,923,300 inhabitants in mid. 1945.

B.—Births.

The number of births registered during 1946 throughout the Egyptian Kingdom was 774,152 or a birth-rate of 42.7 per thousand of population as compared with 787,502 births and a birth-rate of 43.9 per thousand of population in 1945. This shows that the 1946 birth-rate is 1.2 per thousand of population less than the previous year.

It is suggested that the decrease is mainly attributed to the relapsing fever epidemic which raged during the year and accounted for 110,405 cases. Some 70,512 cases having been recorded from April 1945 to April 1946 for which period the birth-rate is calculated. It is known that relapsing fever leaves its victims in a state of severe collapse and general debility. Besides, it is often responsible for abortion and death of the fetus.

This view is supported by the fact that in localities where the epidemic was mild, the birth-rate was unaffected or even showed an increase over the 1945 rate, *e.g.* Frontiers Districts, Alexandria and Cairo. In the localities where the epidemic was severe, the birth-rate showed a marked decrease, *e.g.* Suez, Giza and Ismailia. This is demonstrated in the following table No. 1.

TABLE No. 1

Locality	Relapsing Fever case rate per 1,000,000 of Pop.	Birth-rate 1945	Birth-rate 1946
<i>Localities with increased birth-rate :—</i>			
Frontiers Districts ...	455	48	50
Alexandria	693	55.5	66.6
Cairo	777	60.5	61.9
Suez... ..	1380	77.3	90.4
<i>Localities with decreased birth-rate :—</i>			
Giza	1424	48.9	45.2
Ismailia	1225	73.7	71.2

The birth-rate during 1946, the year following World War II, was 42·7 per thousand of population as compared with 43·4 per thousand in 1938, the year preceding that War, and an average of 41·0 per thousand during the War years 1939–1945.

The decrease in births during War years is attributed to the emigration of large numbers of labour, artisans and tradesmen from Qena, Girga, Assiut, Minia and Beni Suef in Upper Egypt and from Sharkia, Menoufia, etc., in Lower Egypt in search of a living within the military areas in the ports, *e.g.* Suez, Ismailia, Port Said and Kantara and leaving their families behind.

Though the general birth-rate for 1946 is lower than that of 1938, it is observed that in certain localities the birth-rate shows a marked increase, in others it is the reverse while in some it is almost the same. This is explained by the fact that the first were the localities to which the population emigrated, the second were those from which the people emigrated and the third were those where no change in the population took place.

The highest-birth rate of 97·2 per thousand of population was recorded in Suez Governorate and the lowest of 29·7 was recorded in Qena province.

Deaths.

A total of 469,382 deaths or 25·9 per thousand of population was recorded during the year as compared with 512,003 deaths and a ratio of 28·6 per thousand of population or 2·7 per thousand less than in 1945.

The highest death-rate of 57·4 per thousand was recorded in Suez Governorate and the lowest of 15·8 per thousand in Qena Province.

The improvement of the general state of public health was responsible for the decrease in the 1946 death-rate as compared with that of 1945. During the year under review, the total number of infectious diseases cases reported was 176,952 or a ratio of 975·3 per 100,000 of population as against 235,700 cases and a case rate of 1,322·7 per 100,000 of population in 1945. The death-rate showed a decrease in consequence. This was 87·7 per 100,000 of population as against 104·4 in 1945.

Diseases Causing Deaths.

Table No. 5 gives the principal diseases causing deaths in localities having a health bureau and the death-rate of each disease as compared to total deaths. According to this table, diarrhoea and enteritis figure foremost among these diseases with senility diseases following.

Age and Sex Distribution of Deaths.

Table No. 6 gives the number and rate of deaths of the different age groups in localities having a health bureau. This table shows that most of the deaths occur during the first three years of life and that almost half the deaths occur within the first two years of life.

Infantile Mortality.

A total of 109,023 infantile deaths were recorded during the year or a ratio of 141 per thousand births.

This is the lowest infantile mortality rate since 1938. 61,220 infantile deaths or 187·1 per thousand of births were recorded in localities having a health bureau (see tables Nos. 2, 4 and 7).

Again Suez Governorate recorded the highest infantile mortality rate of 215 per thousand births and Qena recorded the lowest rate of 90 per thousand births.

**TABLE NO. 2.—SHOWING RATES OF BIRTHS, DEATHS AND INFANTILE MORTALITY IN EGYPT
FROM 1937 TO 1946**

Year	Birth-rate per 1000 population		Death-rate per 1000 population		Infantile mortality per 1000 births	
	Egypt	Urban Districts	Egypt	Urban Districts	Egypt	Urban Districts
1937	43·5	46·1	27·2	29·8	165	206
1938	43·4	45·7	26·4	29·5	163	206
1939	43·2	46·8	26·0	29·3	161	200
1940	41·6	45·9	26·5	29·5	162	199
1941	40·8	44·2	25·9	31·0	150	200
1942	38·2	44·4	28·7	36·2	168	228
1943	39·6	49·8	28·3	37·2	160	225
1944	41·0	54·9	26·8	35·8	152	208
1945	43·9	57·3	28·6	35·9	153	212
1946	42·7	57·5	25·9	31·7	141	190

**TABLE NO. 3.—SHOWING THE HIGHEST AND LOWEST BIRTH AND DEATH RATES DURING 1946
IN GOVERNORATES, PROVINCES AND TOWNS HAVING A HEALTH BUREAU**

	Govte., Prov. or Town having a Health Bureau	Rate per Thousand
BIRTHS		
Governorate or Province with highest birth-rate	Suez and its suburbs	97·2
" " " " " lowest "	Qena	29·7
Town or <i>Bandar</i> (chief town) with highest birth-rate	Kafr el Dawar ...	106·8
" " " " " lowest "	Gabaress	18·5
DEATHS		
Governorate or Province with highest death-rate	Suez and its suburbs	57·4
" " " " " lowest "	Qena	15·8
Town or <i>Bandar</i> (chief town) with highest death-rate	Helwan	69·4
" " " " " lowest "	El Korana	9·9
INFANTILE MORTALITY		
Governorate or Province with highest infantile mortality ...	Suez and its suburbs	Rate per 1000 births 215
" " " " " lowest "	Qena	90
Town or <i>Bandar</i> (chief town) with highest infantile mortality	Giza	239
" " " " " lowest "	Port Fouad	125

The birth-rate for all the population of Egypt was 42·7 per thousand.

**TABLE No. 4.—SHOWING DISEASE DISTRIBUTION OF INFANTILE MORTALITY IN LOCALITIES HAVING
A HEALTH BUREAU DURING 1946**

Disease	Number of Deaths	Rate per 1000 to Total Births	Rate per 1000 to Total Infantile Mortality
Measles	359	1.1	5.9
Whooping Cough	13	—	0.2
Diphtheria	59	0.2	1.0
Tuberculous Diseases	22	0.1	0.4
Syphilis	135	0.4	2.2
Rickets and Osteomalacia	128	0.4	2.1
Convulsions	134	0.4	2.2
Bronchitis	3,742	11.4	61.1
Broncho-Pneumonia	1,144	3.5	18.7
Pneumonia	497	1.5	8.1
Diarrhoea and Enteritis	34,090	104.2	556.8
Congenital Defects of Conformation	150	0.5	2.5
Congenital Debility	18,787	57.4	306.9
Premature Birth	167	0.5	2.7
Consequences of Delivery	130	0.4	2.1
Infanticide	98	0.3	1.6
Accidents	88	0.3	1.4
Other Causes	1,477	4.5	24.1
TOTAL	61,220	187.1	—

**TABLE No. 5.—SHOWING DISEASES CAUSING DEATHS IN ALL LOCALITIES HAVING A HEALTH
BUREAU DURING 1946**

Disease	Total Number of Deaths	Death-rate per 1000 of Total Deaths
Notifiable infectious and parasitic diseases exclusive of those marked * hereunder	6,374	33.9
Pulmonary tuberculosis*	3,614	19.2
Other tuberculous diseases	483	2.6
Syphilis	227	1.2
Malaria*	33	0.2
Dysentery	444	2.4
Pneumonia (acute, chronic and non-chronic, including broncho-pneumonia and capillary bronchitis)	6,783 ‡	36.1
Bronchitis	13,976	74.4
Other respiratory system diseases	2,362	12.6
Heart diseases	4,330	23.1
Other diseases of the circulatory system	1,553	8.3
Diseases of urinary and genital system (other than venereal)	6,632	35.3
Diseases of puerperium and delivery (other than puerperal septicemia)... ..	632	3.4
Diseases of diarrhoea and enteritis	71,928	382.9
Senility	20,587	109.6
Accidental deaths including suicides	5,055	26.9
Other causes	42,826	228.0
TOTAL DEATHS	187,839	—

‡ This figure includes 5,147 deaths from Acute Pneumonia (lobar and bronchial).

TABLE NO. 6.—SHOWING THE AGE AND SEX DISTRIBUTION OF DEATHS IN LOCALITIES HAVING
A HEALTH BUREAU DURING 1946

	Number of Deaths			
	Male	Female	Total	Percentage to Total Deaths
Less than one year	32,093	29,127	61,220	32·6
1- 2 years	14,312	14,450	28,762	15·3
2- 3 „	6,571	6,882	13,453	7·2
3- 4 „	2,726	2,612	5,338	2·8
4- 5 „	1,545	1,599	3,144	1·7
5-10 „	2,634	2,370	5,004	2·7
10-15 „	2,034	1,370	3,404	1·8
15-20 „	2,025	1,405	3,430	1·8
20-25 „	2,065	1,306	3,371	1·8
25-30 „	2,326	1,587	4,913	2·1
30-35 „	2,036	1,612	3,648	1·9
35-40 „	2,330	1,569	3,899	2·1
40-45 „	2,256	1,517	3,773	2·0
45-50 „	2,251	1,113	3,374	1·8
50-55 „	2,925	1,756	4,681	2·5
55-60 „	1,752	846	2,598	1·4
60-65 „	2,890	1,826	4,716	2·5
65-70 „	2,566	1,652	4,218	2·2
70-75 „	3,571	2,943	6,514	3·5
75-80 „	1,849	1,495	3,344	1·8
80-85 „	2,778	3,479	6,257	3·3
85-90 „	921	1,042	1,963	1·5
90-95 „	1,820	2,670	4,490	2·4
95 years and upwards	1,209	2,021	3,230	1·7
Unknown	72	23	95	0·1
Total	99,557	88,282	187,839	100·0

**TABLE No. 7.—SHOWING THE AGE AND SEX DISTRIBUTION OF INFANTILE MORTALITY IN LOCALITIES
HAVING A HEALTH BUREAU DURING 1946**

Age							Male	Female	Total	Death-rate per 100 Births	Death-rate per 100 Deaths
0- 1 month	...	...	...	...	...	...	7,378	5,680	13,058	4.0	7.0
1- 2 months	...	...	...	...	...	...	2,475	2,182	4,657	1.4	2.5
2- 3 "	...	...	...	...	...	...	2,423	2,348	4,771	1.5	2.5
0- 3 "	...	...	...	...	...	...	12,276	10,210	22,486	6.9	12.0
3- 4 "	...	...	...	...	...	...	2,603	2,584	5,187	1.6	2.8
4- 5 "	...	...	...	...	...	...	2,627	2,500	5,127	1.6	2.7
5- 6 "	...	...	...	...	...	...	2,394	2,148	4,542	1.4	2.4
3- 6 "	...	...	...	...	...	...	7,624	7,232	14,856	4.5	7.9
6- 7 "	...	...	...	...	...	...	2,720	2,664	5,384	1.6	2.9
7- 8 "	...	...	...	...	...	...	2,129	1,994	4,123	1.3	2.2
8- 9 "	...	...	...	...	...	...	2,606	2,456	5,062	1.5	2.7
6- 9 "	...	...	...	...	...	...	7,455	7,114	14,569	4.5	7.8
9-10 "	...	...	...	...	...	...	1,923	1,873	3,796	1.2	2.0
10-11 "	...	...	...	...	...	...	1,750	1,710	3,460	1.1	1.8
11-12 "	...	...	...	...	...	...	1,065	988	2,053	0.6	1.1
9-12 "	...	...	...	...	...	...	4,738	4,571	9,309	2.8	5.0
GRAND TOTAL							32,093	29,127	61,220	18.7	32.6

TABLE No. 8.—SHOWING BIRTHS, DEATHS AND INFANTILE MORTALITY IN EGYPT DURING 1946

	Estimated Population mid-1946	Births		Deaths		Infantile Mortality	
		Number	Rate	Number	Rate	Number	Rate
<i>Governorates :—</i>							
Urban (Cities only)*	2,613,300	158,382	60·6	82,027	31·4	20,691	194
Urban and Rural ...	2,775,100	166,415	60·0	86,025	31·0	31,873	192
<i>Lower Egypt :—</i>							
Urban (Bandars only)*	1,085,200	58,152	53·6	31,569	29·1	9,729	167
Urban and Rural ...	8,106,900	346,673	42·8	212,015	26·2	44,156	127
<i>Upper Egypt :—</i>							
Urban (Bandars only)*	989,400	52,947	53·5	34,944	35·3	10,896	206
Urban and Rural ...	7,261,100	261,064	36·0	171,342	23·6	32,994	126
<i>Egypt :—</i>							
Urban (Cities and Bandars)	4,687,900	269,481	57·5	148,540	31·7	51,316	190
TOTAL (all over Egypt)	18,143,100	774,152	42·7	469,382	25·9	109,023	141

* Urban comprises all towns having a Health Bureau provided there is a pure drinking water installation and a municipal or local council.

TABLE No. 9.—BIRTHS AND DEATHS RETURN FOR EGYPT, 1946

Governorates and Provinces		Estimated Population mid-1946	Births				Deaths				Infantile Mortality	
			Egyptians	Foreigners	Total	Rate per 1000 Population	Egyptians	Foreigners	Total	Rate per 1000 Population	Total	Rate per 1000 Births
Governorates:—												
Cairo	...	1,532,500	93,737	1,094	94,831	61.9	51,966	545	52,511	34.3	19,006	200
Alexandria	...	791,900	43,417	1,443	44,860	56.6	19,528	1,012	20,540	25.9	8,391	187
Ismailia (including suburbs)	...	64,300	4,449	130	4,579	71.2	2,212	53	2,255	35.1	745	163
Port Said (including suburbs)	...	148,600	7,460	148	7,608	51.2	3,264	124	3,388	22.8	1,217	160
Suez (including suburbs)	...	60,000	5,439	107	5,546	92.4	3,210	45	3,255	54.3	1,166	210
Damietta	...	49,500	2,579	1	2,580	52.1	1,001	—	1,001	20.2	353	137
Sinai	...	21,400	1,372	—	1,372	64.1	570	—	570	26.6	209	152
Southern Desert	...	34,300	1,634	—	1,634	47.6	1,017	—	1,017	29.7	356	218
Western Desert	...	61,500	2,913	—	2,913	47.4	1,295	—	1,295	21.1	315	115
Red Sea District	...	11,100	492	—	492	44.3	193	—	193	17.4	95	193
		2,775,100	163,492	2,923	166,415	61.0	84,246	1,779	86,025	31.0	31,873	192
Lower Egypt Provinces:—												
Behera	...	1,208,400	49,086	5	49,091	40.6	25,738	57	25,743	21.3	4,713	97
Dakahlia	...	1,401,100	63,681	7	63,688	45.5	37,089	17	37,106	26.5	8,625	135
Gharbia	...	2,254,700	98,412	16	98,428	43.7	56,558	15	56,573	25.1	11,797	120
Menoufia	...	1,278,100	50,109	6	50,115	39.2	38,966	—	38,966	30.5	7,885	157
Kaliubia	...	693,100	31,970	4	31,974	46.1	20,975	5	20,980	30.3	4,690	147
Sharkia	...	1,271,100	53,372	5	53,377	42.0	32,645	2	32,647	25.7	6,406	120
		8,166,900	346,630	43	346,673	42.8	211,971	44	212,015	26.2	44,156	127
Upper Egypt Provinces:—												
Aswan	...	315,800	10,635	—	10,635	33.7	5,225	—	5,225	16.5	1,173	110
Assiut	...	1,358,900	52,047	1	52,048	38.3	35,562	—	35,562	26.2	6,753	130
Beni Suef	...	639,000	24,069	2	24,071	37.7	13,697	1	13,698	21.4	2,586	107
Fayoum	...	668,100	25,929	1	25,930	38.8	18,925	1	18,926	28.3	4,326	167
Girga	...	1,301,000	41,809	—	41,809	32.1	25,952	—	25,952	19.9	3,900	93
Giza	...	801,700	36,195	79	36,274	45.2	26,995	21	27,016	33.7	6,368	176
Minia	...	1,038,900	36,515	4	36,519	51.5	26,933	5	26,938	25.9	4,847	133
Qena	...	1,137,700	33,776	2	33,778	29.7	18,024	1	18,025	15.8	3,041	90
		7,261,100	260,975	89	261,064	36.0	171,313	29	171,342	23.6	32,994	126

TABLE No. 10.—BIRTHS AND DEATHS RETURN FOR GOVERNORATES AND CHIEF TOWNS OF PROVINCES FOR 1946

Governorates and Chief Towns of Provinces	Estimated Population mid-year 1946	Births			Deaths			Infantile Mortality		Percentage of Infantile Mortality		
		Egyptians	Foreigners	Total	Rate per 1000 Population	Egyptians	Foreigners	Total	Rate per 1000 Population	Under one year	1-9 years	Deaths
										Births	Deaths	Deaths
Governorates:—												
Cairo	1,532,500	93,737	1,094	94,831	61.9	51,966	545	52,511	34.3	19,006	15,517	29.5
Alexandria	791,900	43,417	1,443	44,860	56.6	12,528	1,012	20,540	25.9	8,391	4,438	21.6
Ismailia (Town)	44,700	3,591	130	3,721	83.2	1,652	53	1,705	38.1	653	423	24.8
Port Said	139,500	7,006	139	7,145	51.2	3,095	116	3,211	23.0	1,170	1,041	32.4
Damietta	49,500	2,579	1	2,580	52.1	1,001	—	1,001	20.2	353	229	22.9
Suez (Town)	52,800	5,026	107	5,133	97.2	2,987	45	3,032	57.4	1,104	1000	33.0
Lower Egypt:—												
Benha	34,300	1,809	—	1,809	52.7	1,023	2	1,025	29.9	305	333	32.5
Damanhour	74,800	4,214	—	4,214	56.3	1,855	1	1,856	24.8	681	463	24.9
Mansoura	82,200	4,317	6	4,323	52.6	2,072	15	2,087	25.4	602	503	24.1
Shebin el Kom	36,500	1,813	6	1,819	49.8	1,074	—	1,074	29.4	410	249	23.2
Tanta	109,200	5,163	8	5,171	47.4	2,621	6	2,627	24.1	820	647	24.6
Zagazig	70,400	3,920	3	3,923	55.7	2,002	2	2,004	28.5	676	609	30.4
Upper Egypt:—												
Assiut	66,500	3,301	1	3,302	49.7	1,896	—	1,896	28.5	604	482	25.4
Aswan	22,500	1,116	—	1,116	49.6	542	—	542	24.1	219	110	20.3
Beni Suef	50,400	2,853	2	2,855	56.6	1,608	1	1,609	31.9	547	506	31.4
Fayoum	68,300	3,527	1	3,528	51.7	2,284	1	2,285	33.5	838	617	27.0
Giza	69,000	4,722	75	4,797	69.5	2,865	19	2,884	41.8	1,147	863	29.9
Minia	55,600	2,756	2	2,758	49.6	1,835	3	1,838	33.1	549	452	24.6
Qena	37,900	2,017	—	2,017	53.2	1,172	—	1,172	30.9	436	291	24.8
Souhag	37,000	2,066	—	2,066	55.8	1,116	—	1,116	30.2	411	289	25.9
TOTAL	3,425,500	198,950	3,018	201,968	59.0	104,194	1,821	106,015	30.9	38,922	29,062	27.4

Chapter II.—INFECTIOUS DISEASES

The outstanding features about the incidence of infectious diseases in Egypt during the year 1946 were :—

- (a) A severe relapsing fever epidemic.
- (b) A steady fall in the incidence of typhus and small pox.
- (c) The re-appearance of plague in Alexandria.

RELAPSING FEVER

Except for the few sporadic cases, namely one case in 1932, another in 1933, three cases in 1934, two in 1936 and one case in 1940, the whole country may be said to have been free from relapsing fever during the period from 1926–1943.

The present epidemic first broke out in 1944 with three cases reported in November within Beni-Suef Province and six cases in December within Assiut Province.

During 1945, the epidemic spread widely and affected the whole country.

During 1946, the epidemic increased in severity, a total of 5,501 cases having been recorded during the first four weeks of the year and 7,588 cases during the second four weeks. The total number of cases recorded during the year reached 110,405 with 2,414 deaths or a case-rate of 608 and a mortality rate of 13 per 100,000 of population and a case-mortality-rate of 2·2 per cent.

The most severely infected areas were Suez, Ismailia and Gîza. Aswan and Damietta were the least affected.

The significant characteristics of the epidemic were :—

- (a) A great rise in the incidence of the disease began in the ninth week.
- (b) An abrupt fall in the incidence of the disease occurred during the twenty-ninth week.
- (c) The case-mortality-rate fell from 4·8 per cent in 1945 to 2·2 per cent in 1946.

These facts are attributed to a complete alteration of the system of control of this epidemic as follows :—

- (a) The substitution of Kerosene by D.D.T. in disinfection and delousing.
- (b) The treatment of the sick in their homes by the mobile units touring the villages instead of having them removed to fever hospitals or isolation camps.
- (c) Introduction of D.D.T. dusting gangs throughout the country.
- (d) Introduction of quick means of transport to rush the gangs to where required.
- (e) D.D.T. dusting was done periodically so that the whole country could be dusted three times a year.

As a result of these modifications —

- (1) People hastened to notify the disease.
- (2) Patients sought treatment having realised its value in effecting recovery ; all of which lead to a fall in the death-rate among patients and success in stamping out the epidemic.

TYPHUS

A total of 1,548 typhus cases with 337 deaths were reported during 1946 or a case-rate of 8·5 per 100,000 of Population and a case-mortality-rate of 21·8 per cent as compared to 18,283 cases with 3,627 deaths in the previous year or a case-rate of 102·6 per 100,000 of population and a case-mortality-rate of 19·8 per cent.

The great improvement in the incidence of the disease is attributed to the control measures introduced in connection with relapsing fever epidemic. If, however, we were to review the incidence of typhus in Egypt during the past forty years (*i.e.* 1906–1946), we would observe three severe epidemic waves : the first began in 1914 with World War I and subsided in 1920 ; the second began in 1932 with the economic depression which reduced the standard of living ; the third began in 1939 with World War II.

These facts agree with what is known about typhus ; that it is a disease of poverty and overcrowding, both conditions being usually associated with wars.

PLAGUE

During the year, 211 cases with 57 deaths were recorded or a case rate of 1·1 per hundred thousand of population and a case-mortality-rate of 27 per cent as compared with 218 cases and 108 deaths in 1945 or a case-rate of 1·2 per 100,000 of population and a case-mortality-rate of 49·5 per cent.

It is observed about this epidemic:-

(1) That Alexandria City remained free from plague during the war years 1939-1945. and appeared in epidemic form in 1946, 124 cases with 24 deaths having been recorded.

This is explained by the fact that during war years, Alexandria Port was closed for shipping since it was a military target to night bombers. Ships bringing reinforcements and supplies from the far and near east countries were therefore diverted to Suez Canal Ports. In consequence, plague appeared in the Suez Canal zone during the years 1940-1945.

On the termination of the war and the reopening of Alexandria Port for shipping and trade, plague escaped to Alexandria in the same way as it had previously escaped to Suez Canal Ports, i.e., through ships arriving from plague infected countries in the East, particularly India and Kenya.

(2) Despite the appearance of plague in epidemic form in Suez Canal ports since 1941 and in Alexandria in 1946, the disease failed to penetrate to the interior of the country, thanks to the precautionary measures adopted in the light of past experience. It was observed that, in the past, plague was transmitted to the interior by rivercraft-carrying rats which were a mixture of port and shipping species. Hence deratization posts have been set up at the intakes of canals and along water courses running between the Canal Zone and Alexandria and the interior.

(3) Following the spread of plague in the Canal Zone in 1940 and its attaining a severe form in 1945, deratisation posts were set up in all villages lying on the Ismailia Canal bank from Suez to boundaries of Sharkia Province, namely at Fanara, Kasfareet, Fayed, Abu-Sultan, Abu-Gamous, Abu Suer and Baalwa.

These posts proved effective in preventing the escape of plague to the interior of the country.

SMALL POX

416 cases with 50 deaths were reported during the year or a case-rate of 2·2 per 100,000 of population and a case-mortality-rate of 12·5 per cent.

The epidemic broke out in 1943 having been transmitted from the Hedjaz by the returning pilgrims.

The number of small-pox cases and deaths recorded during the past four years is given below :—

Year	Cases	Deaths
1943	4,138	384
1944	11,194	1,016
1945	1,355	115
1946	416	50

The anti small pox general vaccination carried out in the infected and neighbouring villages had a direct bearing on the fall in the incidence of the disease. The number of persons vaccinated against small pox this year was 4,849,646.

An arrangement has been made whereby one fourth of the population will be vaccinated each year, that is a vaccination of the whole population once every four years. The arrangement was put into effect during the latter half of 1945 and it is proposed to complete the vaccination of the whole population in 1948.

TYPHOID

The number of typhoid cases reported during the year was 4,584 with 637 deaths or a case-rate of 25.2 per 100,000 of population and a case-mortality-rate of 13.9 per cent as compared with 5,286 cases with 833 deaths in 1945 or a case-rate of 29.4 per 100,000 of population and a case-mortality-rate of 15.7 per cent. A total of 2,373 cases with 293 deaths were recorded in Cairo alone and 562 cases with 67 deaths in Alexandria.

Anti Typhoid Inoculation.

Of a total of 639,740 persons inoculated against typhoid, 357,842 received one injection and the remaining 281,898 received two injections.

DIPHTHERIA

2,047 cases of diphtheria with 823 deaths were notified during the year or a case-rate of 11.2 per 100,000 of population and a case-mortality-rate of 40.2 per cent as compared with 3,130 cases with 1,159 deaths in 1945 or a case-rate of 17.5 per 100,000 of population and a case-mortality-rate of 37 per cent.

Anatoxin immunization.

A total of 491,321 persons were immunised against diphtheria. Of this number, 157,321 received one injection, 143,867 received two injections and 190,199 received three injections. Of 170 cases occurring after the third injection, 127 were reported in Alexandria and 31 in Cairo.

CEREBRO-SPINAL FEVER

88 cases with 44 deaths were recorded during 1946 or a case rate of 0.4 per 100,000 of population and a case-mortality-rate of 50 per cent as compared with 65 cases with 49 deaths recorded in the previous year or a case-rate of 0.3 per 100,000 of population and a case-mortality-rate of 75.3 per cent.

INFLUENZA

A total of 17,570 cases with 67 deaths were recorded during the year or a case-rate of 96.8 per 100,000 of population and a case-mortality-rate of 0.38 per cent as compared to 14,642 cases with 152 deaths during 1945 and a case-rate of 82.1 per 100,000 of population and a case-mortality-rate of 1.03 per cent.

MEASLES

6,968 cases of measles with 1,826 deaths were notified during 1946 with a case-rate of 38.4 per 100,000 of population and a case-mortality-rate of 26.2 per cent as compared to 5,444 cases with 1,413 deaths or a case-rate of 30.5 per 100,000 and a case-mortality-rate of 25.9 per cent.

FEVER HOSPITALS

Of a total number of 94,523 admissions to fever hospitals during the year under review, 91,885 were discharged as cured and 3,916 died.

TABLE NO. 11.—BIRTH AND DEATH RATES IN EGYPT—RATIO OF BIRTHS AND DEATHS PER 1,000 POPULATION

Governorate or Mudiria	1938			1939			1940			1941		
	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate
Cairo	42·2	28·1	204	45·0	25·8	190	43·3	26·8	197	45·0	28·8	198
Alexandria	42·3	24·7	202	41·8	24·1	197	37·7	22·3	188	28·0	23·3	193
Ismailia	51·6	24·2	205	50·8	23·8	168	53·2	26·9	186	68·6	42·9	235
Port-Said	41·0	20·8	157	38·9	24·1	166	38·7	18·1	131	31·5	21·6	169
Damietta	44·2	22·2	134	42·5	22·5	149	45·1	22·1	148	46·5	23·0	139
Suez	51·4	27·6	220	54·1	32·1	245	57·7	31·5	204	47·3	44·0	254
Frontier Districts	39·6	17·0	132	37·7	18·0	140	38·1	31·3	136	35·6	31·6	176
Behera	38·9	22·6	112	37·9	22·5	118	36·9	23·6	126	37·9	25·5	122
Dakahlia	48·7	28·1	159	46·3	29·5	160	46·0	30·5	163	46·4	30·8	157
Gharbia	44·8	27·3	153	43·6	27·3	148	43·9	28·6	151	43·9	36·3	127
Menoufia	44·3	31·5	188	43·4	29·7	168	43·6	32·3	185	44·4	29·3	155
Kaliubia	45·3	32·9	182	44·5	30·0	170	43·7	32·1	182	44·5	30·3	160
Sharkia	45·3	25·5	135	42·1	26·1	138	41·6	35·3	134	41·1	26·6	136
Aswan	34·6	24·2	150	34·5	21·7	128	54·5	24·6	144	35·1	24·3	133
Assiut	25·3	25·3	157	43·1	28·4	175	43·1	27·0	164	41·0	25·9	154
Beni-Suef	40·0	24·3	166	39·5	23·6	153	38·7	21·6	138	37·1	19·7	119
Fayoum	45·0	31·5	242	45·3	33·4	231	42·7	30·0	214	41·8	28·1	202
Girga	44·6	23·2	129	41·8	21·6	126	41·8	23·5	132	39·4	20·9	117
Giza	45·4	31·3	187	47·1	27·1	173	46·4	28·9	178	45·4	27·8	158
Minia	43·2	26·2	182	40·8	27·1	187	40·8	26·8	184	40·0	23·6	160
Qena	35·7	19·6	127	32·3	17·3	130	33·3	17·9	123	31·2	17·2	117
TOTAL	43·4	26·4	163	42·2	26·0	160	41·6	26·5	162	40·8	25·9	150

INFANTILE MORTALITY RATE PER 1,000 BIRTHS FROM 1938-1946.

1942			1943			1944			1945			1946		
Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate	Birth Rate	Death Rate	Inf. Mort. Rate
6.3	36.9	247	53.1	37.7	237	58.9	36.8	215	60.5	33.8	207	61.9	34.3	200
4.4	25.2	204	44.4	32.7	250	52.7	29.7	217	55.5	34.7	242	66.6	25.9	187
4.7	38.5	214	61.4	41.1	188	70.9	43.9	184	73.1	37.9	168	71.2	35.0	162
8.3	26.5	183	44.9	24.6	182	53.8	28.9	192	53.4	27.5	187	51.1	22.7	159
1.1	28.8	174	40.1	21.4	151	50.8	20.8	147	54.3	26.4	184	52.1	20.2	136
6.1	58.1	288	84.9	73.5	263	90.6	78.7	283	97.3	62.4	244	92.4	54.2	210
2.2	23.3	165	35.3	23.2	174	43.2	22.8	135	48.0	22.1	130	50.0	23.9	155
0.7	25.0	121	35.9	22.7	109	37.9	22.5	107	42.6	24.2	105	40.6	21.3	97
1.3	34.5	171	41.8	30.9	148	45.0	26.0	142	47.1	31.4	159	45.5	26.5	135
9.1	32.9	146	39.7	28.2	137	41.6	24.9	129	43.4	29.4	137	43.7	25.1	119
8.9	29.7	195	40.6	30.4	165	39.6	30.6	171	40.9	31.2	164	39.2	30.5	175
1.8	33.5	179	44.8	29.5	162	43.6	29.4	162	47.2	30.9	155	46.1	30.3	146
0.1	27.3	136	40.9	25.8	126	41.2	26.2	111	42.8	28.1	125	42.0	25.7	120
0.8	34.1	157	20.3	47.1	215	18.6	30.1	135	40.0	19.5	102	33.7	16.5	110
7.7	28.1	166	36.2	25.6	148	36.6	24.7	139	39.4	30.9	140	38.3	26.2	129
4.9	23.2	144	35.9	22.7	138	35.8	20.9	125	34.8	27.5	142	37.7	41.4	107
0.5	28.7	196	40.1	27.9	189	40.0	30.1	191	41.5	29.3	187	38.8	28.3	166
4.8	23.0	122	33.1	22.3	114	33.7	18.6	93	34.3	19.1	89	32.1	19.9	93
2.6	33.5	196	44.5	31.6	172	46.0	29.2	168	48.9	31.3	163	45.2	33.7	175
6.6	25.4	169	37.6	25.6	165	38.3	25.9	157	40.6	34.6	170	35.2	25.9	132
7.6	16.9	110	27.5	21.9	95	22.0	23.8	105	32.5	14.8	77	29.7	15.8	90
8.2	28.7	168	39.6	28.3	160	41.0	26.8	152	43.9	28.6	153	42.6	25.8	141

TABLE NO. 12.—MONTHLY DEATH-RATE PER 1,000 POPULATION IN EGYPT FROM 1936-1946

Month	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
January	21·7	28·5	25·1	24·1	25·8	33·3	24·6	26·0	28·0	23·7	25·8
February... ..	21·3	19·4	20·9	18·7	19·9	19·1	24·1	21·7	23·3	20·9	24·5
March	22·2	21·3	21·2	20·1	21·8	20·7	23·8	25·1	23·4	22·8	27·3
April	24·4	24·7	20·5	21·0	25·5	22·6	27·8	26·0	25·3	21·9	27·1
May	29·7	30·9	25·9	27·9	31·8	29·4	34·2	30·3	29·2	29·1	30·3
June	31·8	31·5	29·0	30·9	32·1	31·1	39·5	31·8	32·9	36·1	30·9
July	34·2	32·9	34·8	34·9	32·7	32·3	33·9	33·8	33·7	39·1	29·0
August	34·7	31·4	34·5	31·4	29·0	31·8	28·1	31·3	29·9	37·3	26·5
September	29·5	27·0	28·4	26·1	24·7	26·1	24·8	26·3	25·5	31·5	24·1
October	30·1	27·3	25·7	24·9	24·0	24·7	25·1	29·5	24·3	27·7	22·6
November	30·4	25·0	24·9	25·0	24·2	24·5	25·4	27·5	23·2	25·0	20·1
December	35·8	26·6	25·8	27·0	26·3	25·4	25·6	30·0	22·8	27·7	22·0
TOTAL	28·8	27·2	26·4	26·0	26·5	25·9	28·7	28·3	26·8	28·7	25·8

TABLE No. 13.—CASES AND DEATHS OF TYPHUS FROM 1936-1946
IN EGYPT WITH CASE FATALITY RATES PER

Governorate or Mudiria	1936		1937		1938		1939		1940		1941				1942	
	Cases	D.	Cases	D.	Cases	D.	Cases	D.	Cases	D.	Cases	D.	Case-fatality rate per 100,000		Cases	D.
													Cases	D.		
Cairo ...	70	24	103	35	128	37	209	43	364	58	168	34	12	2	2,244	554
Alexandria	14	7	87	17	43	11	60	11	117	28	170	47	23	6	521	151
Ismailia ...	—	—	2	—	—	—	—	—	2	—	—	—	—	—	85	31
Port-Said	4	1	6	—	1	—	3	—	21	—	24	—	18	—	68	7
Damietta	—	—	2	2	1	—	1	1	—	—	—	—	—	—	6	6
Suez... ..	2	—	4	—	—	—	4	—	2	1	4	2	7	4	91	28
Frontier Districts	45	3	15	1	51	—	3	2	5	1	91	8	77	7	113	18
Behera ...	867	91	423	61	574	61	318	69	816	187	1,835	384	163	34	2,788	628
Dakahlia...	312	58	362	61	2,274	46	767	121	699	145	1,763	370	134	28	4,069	708
Gharbia ...	862	93	590	44	316	47	1,195	224	924	151	2,152	366	102	12	4,978	870
Menoufia...	126	20	147	22	354	43	549	110	680	121	678	102	55	8	2,367	426
Kaliubia ...	37	5	38	8	124	15	260	44	15	4	250	43	29	7	363	110
Sharkia ...	125	25	44	20	86	19	200	41	74	21	688	135	58	11	1,477	274
Aswan ...	36	2	43	7	162	35	3	2	91	17	2	1	0·6	0·3	63	14
Assiut ...	34	4	38	1	54	5	49	18	74	16	171	35	13	3	356	76
Beni-Suef	—	—	10	1	—	—	28	3	105	39	911	137	151	22	411	72
Fayoum ...	6	—	4	1	2	—	12	2	18	2	5	1	8	2	8	1
Girga ...	16	4	34	8	102	16	242	43	140	42	109	14	9	1	351	73
Giza... ..	103	36	18	7	168	25	183	38	228	35	350	63	47	8	1,481	290
Minia ...	8	1	36	3	48	4	5	1	3	—	5	1	1	0·2	55	1
Qena ...	90	15	77	12	323	41	206	15	38	5	38	8	3	0·7	165	5
TOTAL ...	2,757	389	2,083	311	2,811	405	4,297	788	4,416	863	9,414	1751	55	10	22,060	441

DISTRIBUTED ACCORDING TO GOVERNORATES AND PROVINCES
 100,000 POPULATION IN 1941, 1942, 1943, 1944, 1945 and 1946

12		1943				1944				1945				1946			
Case-fatality rate per 100,000		Cases	D.	Case-fatality rate per 100,000		Cases	D.	Case-fatality rate per 100,000		Cases	D.	Case-fatality rate per 100,000		Cases	D.	Case-fatality rate per 100,000	
Cases	D.			Cases	D.			Cases	D.			Cases	D.			Cases	D.
158	39	8,751	1912	610	133	1,758	418	121	28.7	1,254	284	84.8	19.2	142	38	9.2	2.4
71	21	1,473	388	198	52	413	108	54.6	14.2	422	81	54.9	10.5	24	5	3.0	0.6
145	53	311	115	536	168	53	45	88.4	75.1	68	42	111	63.7	—	1	0	1.5
50	5	260	23	135	12	89	9	63.1	6.3	102	3	71	2	75	—	50.4	0
13	13	14	11	31	24	5	1	10.7	2.1	17	10	35.7	21	3	—	6.0	0
165	51	1,148	256	2,083	465	99	42	176	74.4	15	2	26.4	3.5	16	6	26.6	10
95	15	225	3	188	2.5	63	1	52	0.9	55	5	45	4	15	5	11.6	3.8
244	55	3,948	731	348	63	1,580	317	135	27.1	2,454	469	207.8	39.7	380	105	3.1	8.1
307	53	3,004	575	225	43	724	220	53.7	16.3	1,569	252	115.4	18.5	119	46	8.4	3.2
232	41	4,400	1007	203	47	2,944	605	135	27.7	3,605	698	163.7	31.7	452	55	20.0	2.4
191	34	3,166	612	254	49	1,968	431	156	34.2	1,823	336	143.3	26.4	82	16	6.4	1.2
55	17	1,655	305	250	46	713	173	105.6	25.6	742	161	108.5	23.5	12	—	1.7	0
123	23	3,785	697	311	57	3,209	538	260	43.5	2,830	469	225.7	37.4	134	29	10.5	2.2
20	4	451	62	139	19	440	120	141	38.3	464	128	150.2	41.4	53	11	16.7	3.4
27	6	700	191	53	14	1,311	255	98.2	19.1	544	129	40.3	9.5	16	5	1.1	0.3
67	12	725	130	117	21	470	129	75.1	20.6	423	59	66.7	9.3	—	—	0	0
1	0.1	22	6	3.3	0.9	9	7	1.3	1.0	15	6	2.2	0.9	—	—	0	0
28	6	1,208	257	96	20	762	169	60.4	13.3	165	44	12.9	3.4	3	—	0.2	0
195	39	3,680	689	481	90	1,163	229	150	29.4	390	108	49.5	13.7	12	10	1.4	1.2
5	1	144	46	14	4.5	423	136	41.2	13.2	743	235	71.6	22.6	3	2	0.3	0.2
15	5	1,118	256	100	23	281	90	24.9	7.9	583	106	51.1	9.2	7	3	0.6	0.2
128	26	40,188	8252	230	47	18,477	4043	104.8	22.9	18,283	3627	102.6	20.35	1548	337	8.5	1.8

TABLE No. 14.—FOUR-WEEKLY DISTRIBUTION OF TYPHUS CASES
FROM 1936—1946

Weeks	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
1-4 ...	185	109	60	76	186	416	1,233	2,094	965	1,243	301
5-8 ...	388	195	182	334	531	855	2,331	3,293	2,163	1,949	371
9-12 ...	461	157	285	804	980	1,739	3,145	4,730	2,910	2,815	290
13-16 ...	592	259	491	876	966	1,898	4,469	7,383	3,002	3,959	176
17-20 ...	427	675	726	908	777	1,796	4,623	9,408	3,325	3,674	93
21-24 ...	350	375	506	631	407	1,211	2,689	6,123	2,524	2,272	63
25-28 ...	242	164	203	345	250	425	1,337	3,834	1,461	1,142	44
29-32 ...	41	63	103	133	102	234	527	1,758	561	499	52
33-36 ...	12	35	70	46	68	92	190	591	329	201	41
37-40 ...	9	8	19	16	26	20	142	221	165	106	48
41-44 ...	10	10	8	13	22	31	152	275	163	105	31
45-48 ...	15	10	9	11	29	235	291	114	108	99	18
49-52 ...	25	13	49	103	72	462	922	347	729	219	20
TOTAL	2,757	2,083	2,811	4,296	4,416	9,414	22,054	40,171	18,477	18,283	1,548

TABLE NO. 15.—CASES AND DEATHS OF TYPHUS, AND RATIO PER 1,000,000 POPULATION
AND CASE-MORTALITY-RATE PER CENT IN EGYPT FROM 1906—1946.

Year	No. of Cases	Rate per 1,000,000	No. of Deaths	Rate per 1,000,000	Case Mortality Rate %	Year	No. of Cases	Rate per 1,000,000	No. of Deaths	Rate per 1,000,000	Case Mortality Rate %
1906	1,668	150	938	84	56.2	1930	288	19	74	5	25.7
1907	1,603	94	836	74	78.6	1931	265	18	57	4	21.5
1908	1,926	255	1,153	101	39.4	1932	2,298	153	399	26	17.5
1909	3,782	326	1,608	139	42.5	1933	7,865	515	1,332	87	16.9
1910	2,908	248	1,210	103	41.6	1934	7,536	488	1,418	92	18.8
1911	5,151	433	1,702	143	33.0	1935	3,151	202	516	34	16.7
1912	5,382	447	1,658	138	30.8	1936	2,757	174	389	25	14.1
1913	4,936	405	1,438	118	29.1	1937	2,083	130	311	19	14.9
1914	9,508	771	2,533	205	26.6	1938	2,811	173	405	25	14.4
1915	17,096	1,368	4,216	337	24.7	1939	4,296	260	788	48	18.3
1916	30,507	2,412	7,096	561	23.3	1940	4,416	263	853	51	19.5
1917	18,569	1,451	4,174	326	22.5	1941	9,414	558	1,751	104	18.6
1918	25,246	1,952	7,354	568	29.1	1942	22,054	1,289	4,411	258	20.0
1919	16,986	299	5,573	426	32.8	1943	40,188	2,304	8,252	473	20.5
1920	13,253	1,002	3,510	265	26.5	1944	18,477	1,049	4,043	229	21.8
1921	4,487	325	1,271	95	28.3	1945	18,283	1,026	3,627	203	19.8
1922	2,489	184	723	53	29.0	1946	1,548	85	337	18	21.8
1923	1,935	142	603	44	31.2						
1924	1,683	122	588	42	34.9						
1925	1,314	94	290	21	22.1						
1926	966	68	201	14	20.8						
1927	794	56	189	13	23.8						
1928	599	41	138	9	23.1						
1929	1,141	78	214	15	18.8						

TABLE NO. 16—FOUR WEEKLY INCIDENCE OF RELAPSING FEVER 1946

Weeks	Cases
1 — 4	5,501
5 — 8	7,588
9 — 12	13,234
13 — 16	26,891
17 — 20	32,315
21 — 24	18,460
25 — 28	4,768
29 — 32	1,086
33 — 36	254
37 — 40	161
41 — 44	62
45 — 48	36
49 — 52	49
TOTAL	110,405

TABLE No. 17.— CASES AND DEATHS OF INFECTIOUS DISEASES NOTIFIED THROUGHOUT
EGYPT DURING THE LAST FOUR YEARS

Disease	1943			1944			1945			1946		
	Cases	Deaths	Rate per Cent	Cases	Deaths	Rate per Cent	Cases	Deaths	Rate per Cent	Cases	Deaths	Rate per Cent
Plague... ..	163	119	66·8	644	393	61·0	218	103	49·5	211	57	27·0
Typhus	40,188	8,272	20·5	18,477	4,043	21·8	18,233	3,627	19·8	1,548	337	21·8
Typhoid and Paratyphoid	4,431	790	17·8	5,019	790	15·7	5,286	833	15·7	4,534	637	13·9
Scarlet Fever	54	3	5·5	30	—	—	12	1	8·3	11	—	—
Cerebro-Spinal Fever	111	57	50·0	147	75	51·0	65	49	75·3	88	44	50·0
Diphtheria	4,143	1,595	38·4	3,326	1,264	38·0	3,130	1,159	37·0	2,047	823	40·2
Measles	4,249	1,022	24·0	7,274	2,475	34·0	5,444	1,413	25·9	6,968	1,826	26·2
Pulmonary T.B. ...	6,770	3,647	53·8	6,950	3,803	54·7	6,819	3,681	53·9	6,407	3,671	57·3
Other forms of T.B.	104	541	—	257	464	—	168	437	260	84	446	531
Chicken-pox	1,238	21	1·6	1,057	15	1·4	1,338	12	0·89	873	11	1·3
Puerperal Septicemia	375	187	49·8	357	158	44·2	387	178	45·9	267	145	54·3
Dysentery	1,873	604	32·2	1,672	537	32·1	1,217	384	31·5	1,130	329	29·1
Influenza	14,056	219	1·5	11,203	204	1·8	14,642	152	1·03	17,570	67	0·4
Anthrax	15	9	60·0	13	2	15·3	4	2	50·0	6	1	16·7
Encephalitis Lethar.	4	3	75·0	1	1	100	2	2	100	2	2	100
Whooping Cough ..	2,054	105	5·1	1,208	105	8·6	1,856	92	4·9	904	54	6·0
Parotitis (Mumps) ..	1,449	31	2·1	1,063	30	2·8	1,743	27	1·5	1,290	13	1·0
Undulant Fever ...	6	4	66·6	20	3	15·0	15	2	13·3	22	2	9·1
Leprosy	393	68	17·3	224	58	25·8	332	53	15·9	124	55	44·4
Rabies... ..	17	19	—	11	21	—	12	25	208	8	25	312·5
Tetanus	442	294	66·5	544	331	60·8	439	303	69·0	435	354	81·4
Acute Polio-Myelitis..	7	2	28·5	11	4	36·3	7	6	85·0	2	6	300
Dengue	2	—	—	1	—	—	—	1	—	—	—	—
Erysipelas	1,956	209	10·6	1,671	156	9·3	1,551	146	9·4	1,181	88	7·5
New Malaria	16,530	1,341	8·1	37,847	1,867	4·6	5,887	56	0·95	9,262	22	0·2
Recurrent Malaria ..	—	—	—	218,231	14	0·006	141,557	19	0·013	5,686	4	0·1
Jaundice	2	1	50·0	—	—	—	—	—	—	1	—	—
Small-pox	4,138	384	9·2	11,194	1,016	9·0	1,355	115	8·4	416	50	12·5
Relapsing Fever ...	—	—	—	10	—	—	18,126	881	4·8	110,405	2,414	2·2
Acute Pneumonia ..	6,935	5,762	83·0	6,929	5,242	75·6	5,805	4,848	83·5	5,420	4,432	21·8
Glanders	—	—	—	—	—	—	—	—	—	—	—	—
Total	111,708	25,284	22·6	335,391	23,071	6·8	235,700	18,612	7·8	176,952	16,915	9·0

TABLE NO. 18.—CASES AND DEATHS OF INFECTIOUS DISEASES DISTRIBUTED

Governorate or Mudiria	Year	Small-Pox		Plague		Typhus		Relapsing Fever		Typhoid		Cerebro-Spinal Meningitis		Diphtheria	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Cairo...	1945	115	9	—	—	1,254	284	2,235	42	2,846	383	33	25	1,812	420
	1946	20	2	—	—	142	32	11,918	301	2,373	293	45	17	991	202
Alexandria	1945	97	11	—	—	422	81	1,946	92	1,012	139	9	6	351	110
	1946	7	1	124	31	24	5	5,489	226	562	67	31	16	309	79
Ismailia ...	1945	7	3	122	66	68	42	162	10	78	22	1	1	8	4
	1946	—	1	32	11	—	1	787	88	14	7	—	—	5	1
Port-Said ...	1945	3	1	74	31	102	3	212	9	346	24	7	4	27	8
	1946	6	—	15	3	75	—	1,127	13	398	20	3	3	41	10
Damietta ...	1945	—	1	—	—	17	10	2	1	20	1	—	—	15	17
	1946	—	—	—	—	3	—	41	2	19	6	—	—	5	21
Suez ...	1945	2	—	22	11	15	2	1,403	45	46	8	1	1	22	8
	1946	3	—	21	9	16	6	828	20	59	14	2	1	29	18
Front. Dist.	1945	6	2	6	—	55	5	109	7	37	3	—	—	9	2
	1946	4	—	—	—	15	5	584	13	46	5	—	—	16	4
Behera ...	1945	291	27	—	—	2,454	469	261	16	82	26	—	—	109	77
	1946	109	17	—	—	380	105	5,879	139	93	19	—	—	58	36
Dakahlia ...	1945	152	19	—	—	1,569	252	149	11	43	10	—	1	134	82
	1946	19	2	4	—	119	46	6,755	106	84	20	1	—	88	56
Gharbia ...	1945	396	24	—	—	3,605	698	132	6	105	39	11	7	186	129
	1946	89	8	—	—	542	55	11,470	131	119	32	1	1	121	105
Menoufia ...	1945	53	4	—	—	1,823	336	22	11	59	14	—	—	76	39
	1946	81	3	—	—	82	16	9,368	169	85	16	—	—	56	52
Kaliubia ...	1945	19	1	—	—	742	161	47	40	41	9	—	—	81	53
	1946	4	1	—	—	12	—	3,110	77	64	9	1	1	71	51
Sharkia ...	1945	18	—	—	—	2,830	469	105	7	41	15	2	3	49	38
	1946	15	4	6	—	134	29	5,743	129	90	13	1	1	41	14
Aswan ...	1945	—	—	—	—	464	128	4	1	5	—	—	—	20	8
	1946	—	—	—	—	53	11	589	11	7	1	—	—	12	10
Assiut ...	1945	6	1	—	—	544	129	1,803	105	210	42	—	—	45	21
	1946	—	—	—	—	16	5	10,454	242	229	29	1	1	39	23
Beni Suef ...	1945	25	—	—	—	423	59	3,324	225	7	1	—	—	14	7
	1946	34	2	—	—	—	—	1,199	48	12	9	—	—	25	14
Fayoum ...	1945	53	2	—	—	15	6	589	27	5	2	—	—	15	15
	1946	—	—	—	—	—	—	5,671	27	8	3	—	—	7	5
Girga... ..	1945	—	—	—	—	165	44	534	27	48	13	—	—	6	6
	1946	1	1	—	—	3	—	6,333	132	68	7	—	—	13	7
Giza ...	1945	36	7	—	—	390	108	2,763	105	182	61	1	1	99	84
	1946	5	3	—	—	12	10	11,424	255	173	49	3	2	95	79
Minia... ..	1945	69	3	—	—	743	235	1,497	74	40	13	—	—	28	17
	1946	—	—	—	—	3	2	5,870	144	42	6	—	—	9	19
Qena ...	1945	7	—	—	—	583	106	196	20	33	8	—	—	24	14
	1946	20	5	—	—	7	3	5,765	135	39	12	—	—	19	19
TOTAL ...	1945	1,355	115	218	168	18,283	3,627	18,126	291	5,286	833	65	49	3,130	1,159
	1946	416	50	211	57	1,548	337	110,405	2,414	4,584	637	88	44	2,047	823

ACCORDING TO GOVERNORATES AND PROVINCES FOR 1945 AND 1946

Measles		T.B. of Lungs		Acute Pneumonia		Influenza		New Malaria		Recur. Malaria		Other Inf. Diseases		TOTAL	
C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
506	213	3,063	1,511	2,202	1,728	2,500	11	297	11	145	—	2,827	575	19,835	5,242
635	1,049	2,986	1,473	2,225	2,396	4,634	12	212	2	50	—	1,987	567	29,218	6,256
765	136	1,371	800	2,329	219	4,096	14	201	4	—	—	1,389	250	14,078	3,861
138	3	1,403	84	1,390	1,094	5,712	7	208	5	—	—	1,675	204	17,012	2,552
6	2	12	46	28	73	149	—	—	1	—	—	36	21	677	291
1	2	1	40	1	43	51	—	6	2	—	—	4	14	967	210
32	10	175	121	73	28	185	—	66	—	—	—	191	36	1,496	275
80	12	202	101	89	48	578	—	57	—	—	—	234	32	2,868	295
6	—	35	31	12	6	13	—	3	—	—	—	43	8	166	75
—	—	53	28	17	3	72	—	8	—	—	—	11	3	229	63
9	2	84	48	126	50	438	3	228	8	172	—	88	24	2,656	210
43	5	88	51	132	49	363	2	132	—	73	—	124	10	1,916	185
390	37	9	—	59	8	140	1	461	—	21	—	571	5	1,867	70
176	11	15	9	123	17	246	2	341	1	—	—	255	9	1,827	76
166	51	190	143	134	52	217	4	1,438	1	130	1	337	79	5,839	946
225	16	80	122	108	35	399	—	2,410	1	1	—	271	96	9,943	586
1,027	193	385	132	60	25	317	10	573	7	52	—	553	55	5,014	818
254	50	248	140	39	34	298	3	485	—	25	1	148	107	8,567	513
390	48	401	203	155	165	863	11	851	3	2,459	—	606	105	10,210	1,440
262	21	368	182	89	136	1,537	2	248	—	1,519	—	418	62	18,583	778
153	29	121	46	21	21	674	6	28	—	2	—	382	42	3,615	568
1,049	31	102	52	32	16	521	7	63	—	—	—	322	44	11,764	404
85	40	85	39	58	19	776	10	489	—	9	—	246	47	3,093	416
378	28	103	56	52	29	452	1	626	1	32	—	128	37	5,033	291
118	39	147	66	29	44	265	2	426	2	34	—	295	61	4,486	746
245	27	135	115	21	100	247	1	553	2	9	—	151	37	7,524	470
33	5	69	32	50	29	70	3	663	5	28,785	2	112	7	29,615	220
6	—	76	38	8	16	113	3	3	—	991	2	81	7	1,965	98
647	283	136	73	93	82	1,303	26	29	1	24,921	—	409	86	30,130	849
516	147	121	94	121	135	348	7	13	—	199	—	275	93	12,359	782
32	7	50	28	36	84	769	7	4	2	2	—	140	40	4,805	460
77	56	41	22	4	51	52	1	43	1	1	—	121	30	1,600	234
65	7	91	66	23	18	34	6	34	1	381	—	78	28	1,833	178
117	10	78	53	21	27	4	1	1,622	3	1,781	1	129	19	9,496	151
135	41	15	14	67	19	449	8	6	2	22,201	—	87	22	23,713	196
273	88	20	10	52	31	242	6	25	1	381	—	123	27	7,528	316
229	47	162	142	91	101	326	4	44	—	—	—	208	76	4,536	736
1,030	139	170	135	236	202	298	2	109	—	—	—	283	57	14,537	941
525	141	106	58	73	53	777	13	15	—	—	—	303	35	4,177	642
274	18	76	74	30	36	556	3	52	—	—	—	159	55	7,091	347
125	82	112	52	86	25	311	13	6	8	62,243	16	128	29	13,804	373
169	112	51	62	30	17	214	7	8	3	624	—	74	42	7,025	417
5,444	1,413	6,950	3,681	5,805	4,848	14,642	152	5,887	56	141,557	19	8,782	1,672	235,760	18,612
6,968	1,826	6,407	3,617	5,420	4,432	17,570	67	9,262	22	5,686	4	7,026	1,539	176,952	15,915

TABLE NO. 19. — MEDICO-LEGAL STATEMENT FOR 1946

Locality	Fatal Cases		Serious Cases		Slight Cases	
	Criminal	Accidental	Criminal	Accidental	Criminal	Accidental
Cairo	—	—	176	90	20,019	1,452
Alexandria	254	664	300	9,870	1,230	1,500
Canal	73	213	803	286	408	2,839
Suez... ..	26	57	22	13	2,171	456
Damietta	18	25	111	22	767	120
Frontier Districts	19	50	43	180	339	528
Behera	218	322	723	278	2,880	1,036
Sharkia	424	185	365	216	2,329	668
Dakahlia	280	385	737	585	5,370	1,752
Gharbia	127	294	350	322	3,707	1,282
Kaliubia	103	123	449	134	2,775	824
Menoufia	60	164	418	114	2,775	824
Aswan	—0	25	3	6	870	105
Assiut	230	225	501	281	2,987	1,942
Beni-Suef	103	85	173	159	1,921	672
Fayoum	63	83	104	136	1,543	550
Girga	338	2,495	157	215	1,144	385
Giza	48	154	449	198	1,609	837
Qena	33	161	258	80	2,099	845
Minia	123	175	203	207	2,820	967
TOTAL	2,540	5,885	6,345	13,392	58,440	19,457

Chapter III – RURAL HEALTH

A rural health department was created in 1942 and annexed to the Under Secretary of State for public services. Rural health services had, until the end of 1945, been conducted by Provincial Councils and expenditures met from credits provided by the Ministry. Since then these services have been annexed to the Department of Preventive Medicine and the Under Secretary of State for medical affairs, and the credits are now allocated for the creation of rural health centres.

By the end of 1946, there were 103 village health centres as against 85 at the end of 1945 or 18 centres more. 27 centres were provided with in-patient accommodation as compared with 12 at the end of 1945. 17 child welfare units were increased during 1946 bringing their number to 82 as compared with 65 at the end of 1945.

This increase had a direct bearing on the activities of the health centres during 1946 as may be observed from comparison of the following figures:-

	1945	1946
Number of new out-patients	384,243	548,117
Number of new ophthalmic cases	59,812	80,316
Number of operations performed for in-patients	432	1,143
Number of admissions to in-patient sections	1,065	2,042
Number of blood specimens taken for Wassermann's exam.	16,791	23,207
Number of arsenic injections given... ..	11,074	12,028
Number of bismuth injections given	6,001	12,028
Number of anti-bilharzia injections	673,573	760,152
Number of anti-dysentery injections	5,759	5,062
Number of tetrachloride doses	15,474	66,343
Number of chenopodium oil doses	20,121	66,343
Number of new pregnant	25,234	29,268
Number of new children	269,481	344,617
Number of confinements	25,082	26,705
Number of home visits to pregnant by M.Os. and Midwives... ..	34,967	41,113
Number of home visits to puerperals by M.Os and Midwives	145,811	162,995
Number of home visits to infants by M.Os. and Midwives	50,088	100,635

The following table No. 20 shows the activities of these health centres in detail.

TABLE NO. 20.—SHOWING ACTIVITIES OF

Province	No. of Health Centres	Out patients		Ophthalmic		Operations		No. admitted to in-patient	Venereal diseases					Ender	
		New Cases	Old Cases	New Cases	Old Cases	Out-Patient			Blood specimens	Positives	No. beginning treatment	No. arsenic injections	No. bismuth injections	New cases examined	Positives
Behera	9	61·073	102·590	6·138	18·673	2·510	283	819	1·159	75	83	638	55	27·619	16·83
Gharbia	17	83·980	153·207	5·004	15·769	2·819	132	278	2·821	289	209	2·375	1·754	49·657	28·71
Dakahlia... ..	10	43·570	64·676	2·898	10·290	1·828	—	—	2·287	224	199	1·538	396	24·774	14·66
Kaliubia... ..	4	21·506	19·461	1·684	1·637	169	530	198	1·616	269	108	1·514	1·160	8·388	5·71
Sharkia	9	38·162	78·630	5·191	10·358	1·185	—	—	2·631	341	413	2·177	1·559	17·846	12·98
Menoufia... ..	8	66·510	56·941	10·471	46·383	1·812	3	56	3·402	248	201	1·456	1·384	30·518	18·48
Giza... ..	7	75·189	56·360	6·926	12·404	1·290	95	263	4·563	589	565	6·706	3·522	21·215	11·87
Beni Suef	2	6·423	64·466	3·401	12·716	197	73	85	721	13	14	184	265	7·097	4·36
Fayoum	2	16·479	14·535	1·511	1·733	204	7	9	840	21	12	132	—	4·165	2·91
Minia	8	27·040	17·683	19·558	37·162	367	11	302	2·225	374	305	2·740	1·839	17·364	7·63
Assiut	10	10·277	6·436	1·772	4·607	29	—	6	654	82	10	244	67	5·532	1·54
Girga	5	14·614	4·740	6·773	7·838	116	—	—	217	23	4	51	17	4·595	3·45
Qena	8	21·720	9·621	6·409	4·599	66	9	26	71	33	32	202	16	945	70
Aswan	4	53·574	1·978	2·580	6·952	—	—	—	—	—	—	—	—	40	1
TOTAL	103	490·117	593·324	80·316	191·121	12·692	1·143	2·042	23·207	2·581	2·155	19·957	2·028	9·755	129·90

RURAL HEALTH CENTRES DURING 1946

" parasitic " Diseases

Maternity and Child Welfare

berzia		Am. Dysentery			Intestinal Parasites			No. of Pellagra cases	Pregnants		Children	Obstet.			Visits to houses of		
New beginning Treatment	No. of injections	Positives	No. beginning treatment	No. of injections	Positives	o o L 4 doses	Oil of chenopodium doses		New	Old		In houses	In hospital	Total Deliveries	Pregnants	Puerperals	Children
12.418	108.343	347	179	993	15.457	2.157	8.039	535	4.241	9,982	41.744	1.728	—	1.728	3.775	10.800	5.057
18.186	152.581	561	148	712	26.472	771	16.985	580	3.756	18.835	55.473	4.053	18	4.071	10.259	27.121	32.510
1.389	89.511	170	130	472	15.147	1.023	11.016	149	2.780	11,028	29.461	2.875	—	2.875	3.315	18.102	11.165
4.469	38.872	223	9	49	4.637	2.712	2.440	198	2.704	4.726	25.654	1.158	9	1.167	1,725	4.492	3.351
10.034	54.825	115	150	575	9.303	1.233	1.658	636	2.391	8.726	29.470	2.664	11	2.678	2,927	15.895	12.054
11.976	117.880	60	50	302	22.105	354	16.984	400	3.048	8.190	23.755	2.250	1	2.251	3.509	15.872	5.191
8.859	79.670	82	81	441	11.937	3.968	6.505	852	2.812	12.064	46.943	3.229	29	3.258	3.867	17.877	7.601
3.025	23.381	54	38	205	3.090	348	1.384	53	1.199	5.697	11.716	991	11	1.002	776	5.491	860
2.383	196.149	69	43	156	452	56	34	2	2.674	12.645	48.268	2.140	20	2.460	3,670	14.830	5.012
4.569	38.595	210	174	710	4.473	1.087	1.080	45	2.116	12.125	24.470	1.903	14	1.917	5.619	11.935	14.907
1.163	9.249	89	25	150	475	227	124	—	1.480	2.437	7.663	3.097	197	3.294	1.648	20.767	2.927
2.739	22.126	31	27	154	1.266	271	71	—	67	9	—	4	—	4	6	13	—
641	5.450	25	25	140	97	54	14	6	—	—	—	—	—	—	—	—	—
15	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
909.066	760.152	1.836	1.069	5.062	714.911	14.261	66.343	3.456	29.268	766.464	344.617	26.395	310	26.705	41.113	162.995	100.635

Chapter IV.—FOOD CONTROL

TABLE No. 21.—STATISTICAL LIST SHOWING QUANTITIES OF FOODSTUFFS CONDEMNED, NUMBER OF SAMPLES TAKEN AND RESULTS OF THEIR ANALYSIS DURING 1916
(FIGURES FOR CAIRO AND ALEXANDRIA ARE NOT INCLUDED).

Name of Article	Foodstuffs Condemned					Samples taken					Percentage	
	Number	Bottles	Cans	Bottles	Okes	Number of Samples	Genuine	Adulterated	Unfit	Not analysed	Adulteration	Unfitness
1.—Fresh Foods:—												
Fruits and Vegetables...	59,905	540	120	3,147	30,511	3	3	—	—	—	—	—
Fish	576	—	—	3,893	2,144	—	—	—	—	—	—	—
Meat	33	—	—	3,427	800	—	—	—	—	—	—	—
Other Fresh Foods ...	2,136	—	—	358	146	—	—	—	—	—	—	—
2.—Cooked Foods												
	17,860	—	—	1,468	2,109	3	3	—	—	—	—	—
3.—Canned Foods:—												
Jams	—	4	490	167	7	7	7	—	—	—	—	—
Milk and its Products...	—	578	—	23	23	—	—	—	—	—	—	7.6
Fruits and Vegetables...	593	—	5,100	344	4,830	26	24	—	—	—	—	—
Meat	—	—	103	5	70	2	2	—	2	—	—	—
Fish	306	—	2,911	622	2,006	1	1	—	—	—	—	—
Other Canned Foods ...	8	—	13	52	115	9	6	—	3	—	—	33
4.—Oils:—												
Olive Oil...	—	—	—	—	22	65	49	10	—	—	15.4	9
Sesame Oil	—	—	—	31	17	540	531	2	6	—	0.3	0.9
Linseed Oil	—	—	—	237	319	219	182	13	7	—	5.9	1
Lettuce Oil	—	—	—	—	—	10	4	—	24	—	—	60
Safflower Oil...	—	—	—	—	—	9	8	1	6	—	88	—
Cotton-Seed Oil ...	—	—	—	482	137	142	140	—	—	—	—	—
Other Oils	—	—	—	16	—	57	56	1	2	—	1.7	—

**TABLE No. 22.—SHOWING WORK DONE BY FOOD CONTROL SQUADS
IN CUSTOMS HOUSES DURING 1946**

A - Consignments Examined and Results of Samples taken therefrom.

No. of Consignments Examined	No. of Samples taken	Results		
		Genuine	Unfit	Adulterated
10,927	742	547	158	37

B - Foodstuffs Condemned or Refused entry into the Country

Kind of Foods	Kilos	Cans or Bottles	Boxes	Sacks
1.—Fresh Foods :—				
Vegetables	30,020	—	—	2,174
Fruits	44,078	—	—	122
Meat	820	—	—	—
2.—Canned Foods :—				
Jams and Dried Fruits	147,037	1,625	205	—
Milk and its Products... ..	22,277	25,948	1,050	—
Meat	102	24,165	7	—
Fish	535	8,160	6	—
Vegetables and sauce	203	1,743	—	—
3.—Oils :—				
Olive oil	4,144	19	122	—
Sesame oil	2,636	—	—	—
4.—Different Foods :—				
Flour	22,865	—	—	18,830
Flour Products	12,638	—	—	42
Sweets and chocolate	154	337	—	—
Butter	24	24	—	—
Masli	565	14	—	—
Margarine and Fat			—	—
Tea	1,625	—	8	—
Coffee	—	—	—	—
Wine	45,971	91	77	383
Beer	—	2,674	—	—
Seeds and Corn	66,215	—	—	—
Nuts and Almonds	53,671	—	—	660
Spices	21,250	58	853	4,080
Cheese	43	10	—	—
5.—Other Foods	28,783	32,163	31	17
TOTAL	505,656	97,031	2,359	26,308

**TABLE No. 23.—GIVING NUMBER OF PROCÉS-VERBEAUX OF CNTRAVENTIONS DRAWN UP UNDER
ART. II OF LAW 48 OF 1941**

P.V. drawn up under article II of Law No. 41 of 1941	No. of P.V. drawn up against Itinerant Vendors	No. of P.V. drawn up against Milk Vendors	Bandars to which the Milk Vendors regulations were applied	Bandars to which itinerant vendors regula- tions were applied	No. of itinerant Vendors licensed during 1946	No. of Milk Vendors licensed during 1946
1,174	10,748	3,382	614	76	1,644	630

**TABLE No. 24,— SHOWING No. OF SAMPLES OF MILK TAKEN
AND THE RESULT OF THEIR ANALYSIS.**

No. of Samples	Result of Analysis			
	Genuine	Adulterated by removal of fat	Adulterated by addition of water	Adulterated by both
12,822	11,994	426	327	75

Chapter V — HEALTH PROPAGANDA.

Good progress was made during the year by health propaganda units. Health education was extended to all classes of the population. Propaganda units assisted during epidemics in combating infectious diseases and in promoting the activities of the other sections of the Ministry.

Herebelow is a brief summary of the activities of the propaganda units :—

(1) The health propaganda units numbering 14 in the provinces and three in Cairo, held 11,905 propaganda meetings. Meetings were held in public markets, parks, clubs, institutions, army and police units, schools and orphanages in districts and urban towns.

(2) Propaganda preachers delivered 2,480 health sermons in health propaganda meetings and mosques. Some 1,716,000 people attended these sermons.

(3) 1,500,000 pamphlets dealing with various health questions were distributed.

(4) Sixteen new artistic posters were prepared presenting various health aspects. 30,000 copies of these were distributed to government and private institutions for displaying in their premises.

(5) Miniature museums of hygiene consisting of several health models have been prepared. 20 such museums have been presented to child welfare centres and ancylostoma units.

(6) Broadcasting as an effective means of health propaganda has been exploited to the full. Some 32 health lectures, 24 plays and six dialogues were broadcasted.

(7) Lectures to school teachers started last year were continued this year. The object is to equip the teachers and the educated classes with sufficient knowledge to enable them to carry out health propaganda among pupils. Lectures were also delivered to Imams and preachers of El Azhar University and the Egyptian Army.

(8) Fairs were held in conjunction with other sections of the Ministry where the public were urged to avail themselves of the services of these sections.

Thus during the relapsing fever outbreak, mobile propaganda units accompanied the disinfection and isolation services calling on the inhabitants to co-operate in combating the disease. A total of 758 anti-relapsing fever propaganda meetings were held with approximately 1,750,000 attendances. 381 propaganda meetings were held for the benefit of child welfare centres which were attended by 266,700 ladies. 381 other meetings were held on behalf of ancylostoma and bilharzia units.

(9) Co-operation with other ministries and private institutions namely :—

(a) 380 propaganda meetings were held in co-operative societies, public play grounds, sporting clubs, social centres and rural reform societies of the Ministry of Social Affairs. These were attended by 266,000 persons.

(b) A total of 600 sermons were delivered by Imams and preachers of the Wakfs Ministry in mosques.

(c) 250 propaganda meetings were held for army units in Cairo and the provinces.

(d) 350 propaganda meetings were held in schools and 20,000 health pamphlets distributed. Prizes to the value of L.E. 100 were awarded to school societies which distinguished themselves in propaganda work. Besides, propaganda activities covered orphanages, governmental and private, workmen centres, benevolent and other social institutions.

Part II. - SOCIAL HYGIENE

Chapter VI - MATERNITY AND CHILD WELFARE

The Ministry spares no effort in raising the health standard of the population by combating such evils as impede the progress of maternity and child welfare. Among these evils may be cited the spread of ignorance and poverty, poor habitations, excess of children in poor families, shortage of midwives, unemployment, congenital weakness and infectious diseases. To these may be added poor feeding and the prevalence of superstitions and quackeries.

Great strides have been made in this direction. Child welfare centres have been generalised throughout the country. Steps have been taken to graduate the largest number of assistant midwives and visiting nurses. 120 assistant midwives have graduated this year. Special interest was taken in foundlings and stray infants. Special nurseries have been provided for their accommodation and those of workwomen who cannot look after their own children during daytime.

In order to raise the health and social standards of children accommodated in foundling homes, and to protect them from contracting skin diseases from new arrivals, an arrangement has been made whereby weaned children are now entrusted to nurses. A credit of L.E. 18,000 has been allocated in this year's budget for this purpose.

Child welfare centres have been provided with ultra violet apparatus for the treatment of rickets. Fresh and preserved milk and vitamins are also distributed to children free of charge.

The maternity and child welfare centres at Mansura and Sennouris which belonged to Dakahlia and Fayoum Provincial councils have been annexed to this Ministry. A child welfare centre has been approved at Sayeda, Cairo. A sum of L.E. 8,000 has been allocated for the construction of a maternity and child welfare centre at Fashn.

By these activities, the Ministry aims at reducing the infantile mortality rate which reached a record ratio during the late War years particularly the period between 1940 and 1943 when 247 per thousand were recorded in 1942, 237 in 1943, 215 in 1944 and 207 per thousand in 1945. The steady improvement is gratifying and promising.

TABLE NO. 25.—STATEMENT OF WORK DONE BY CHILD WELFARE CENTRES IN EGYPT DURING 1946

Cases	Number
Old Pregnants	463,238
New Pregnants	12,049
Blood specimens for Wassermann's reaction	30,418
Positive specimens for Wassermann's reaction	2,053
Number of children attending Centres	1,578,696
Confinements attended by midwives	14,260
„ „ assistant midwives	80,112
„ „ medical officers	403
Total Confinements	94,775
Confinements from outside (not registered)	7,325
„ referred to hospitals	215
Full term still births	893
Premature still births within first three months	99
„ „ „ second three months	251
„ „ „ third three months	510
Maternal mortality due to confinement	39
Infantile mortality within first month of life	1,063
Midwife visits to pregnant during 9th month	37,446
Medical Officer visits to sick puerperals... ..	2,509
Midwife visits to puerperal mothers	245,161
Other visits	23,921
Visits to homes of pregnant	23,165
„ „ infants... ..	66,251
Cases of eclampsia	99
„ laceration of perineum	768
„ placenta Previa	67
„ puerperal sepsis	77
Urine samples	434,908
Antenatal albuminuria	132
Milk contribution to mothers and babies	Kilo 215,337
Ready made garments contributed to mothers and babies	3,550
Material	Metres 4,105

Chapter VII -- CHEST DISEASES

Statistical Data.

Since the campaign against Tuberculosis was first launched in Egypt in 1929 until the end of 1945, a total of 61,674 positive T.B. cases were recorded. A further 7,499 cases were detected during the year 1946, making a total of 69,173 cases at the end of 1946.

During the year, the following units were opened :—

- (1) Sherbin chest diseases dispensary on March 3, 1946.
- (2) In-patient section at Sherbin dispensary with an accommodation of 20 beds on April 1, 1946.
- (3) A Sanatorium at Kom el Shokafa in Alexandria, with an accommodation of 120 beds on April 1, 1946.
- (4) A branch of Damietta chest diseases dispensary at Fareskour on April 21, 1946.
- (5) A branch of Qena chest diseases dispensary at Nag-Hamadi on May 11, 1946.
- (6) A branch of Tanta chest diseases dispensary at Mit-Ghamr on May 30, 1946.
- (7) A branch of Damanhour chest diseases dispensary at Shubrakhit on June 17, 1946.
- (8) A branch of Sherbin chest diseases dispensary at Dekernes, on September 26, 1946.
- (9) A branch of Mansoura chest diseases dispensary at Simbellawein on September 14, 1946.
- (10) A branch of Mehalla el Kobra chest diseases dispensary at Kafr el Sheikh on September 23, 1946.
- (11) A branch of Fayoum chest diseases dispensary at Etsa on November 18, 1946.
- (12) Souhag chest diseases dispensary on November 19, 1946.
- (13) In-patient section at Souhag dispensary with an accommodation of 20 beds on December 7, 1946.

The chest diseases units are as follows :—

- 19 Dispensaries.
- 12 Branch dispensaries.
- 12 In-patient Sections within dispensaries.
- 4 Sanatoria.
- 2 Surgical T.B. Institutions.
- 4 Proventoria.
- 1 Colony for Convalescents.

The following are the occupations of T.B. patients detected during the year 1946:

- 431 Tradesmen : consisting of 126 food-stuff-vendors, 50 poultry and cattle merchants, 90 grocers, 64 fruiterers, 101 other trades.
- 506 Employees : including 216 civil employees, 123 commercial employees 36 teachers, 131 other employments.
- 2,165 Craftsmen : consisting of 73 cooks, 44 waiters, 149 barmen, 58 domestic servants, 49 servants (farrashes), 30 gatekeepers, 86 barbers, 66 laundrymen, 120 drivers, 133 tailors, 122 shoemakers, 130 carpenters, 70 painters, 77 building-labourers, 275 employees in firms, 135 weavers, 188 mechanics, 47 printers, 313 other occupations.
- 1,408 Farmers.
- 215 Pupils.
- 2,774 Unemployed : including 2,011 invalids, 456 children, 407 unemployed.

Of 137,320 new patients examined during the year, 7,499 were found positive for tuberculosis. Of these, 314 were children and the remaining 7,185 were adults.

Of 7,260 contacts (3,038 children and 4,222 adults) examined, 210 developed tuberculosis.

Health visitors paid 26,678 visits this year, and the Medical Officers 6,750 to tuberculous patients.

Appended to this report are detailed statistical data of the work carried out by the various dispensaries and other institutions.

Therapeutic and Social Activities.

Curative, social and preventive activities proceeded according to original plans referred to in previous reports. During this year, however, the following measures were taken :—

(1) Considering the great distances which often separate outlying patients from the main dispensaries by reason of the geographical construction of the Country and lack of means of communications in many parts, and in view of the extreme poverty of certain classes of the population which prevents many a patient from seeking treatment at the main dispensaries, being incapable of affording the necessary travelling expenses, it was deemed necessary to provide branch clinics in connection with the main dispensaries. These branch clinics visit surrounding localities once or twice a week. Thus treatment has been brought to the door of patients, saving them the trouble and expense of travelling to the main dispensary. These branch clinics have become so popular that eight were opened this year as mentioned earlier.

(2) It was observed that Alexandria, the second largest city in Egypt was short of treatment institutions. A Chest Diseases Dispensary was therefore opened in 1938, followed by a Children Preventorium in 1940. So many positive cases were discovered by the dispensary that a sanatorium was considered indispensable. The Alexandria Municipality was approached on several occasions until at last H.E. Fouad Ibrahim Girgis Pasha contributed the sum of L.E. 25,000 for this purpose. In view, however, of the high prices of materials, a house was leased as a temporary measure. The Municipality evacuated the Boys Orphanage at Kom el Shokafa, and placed it at the disposal of the Ministry at a nominal rent. Several modifications of the building had to be carried out by the Ministry and after providing it with the necessary apparatus and equipment, it was opened for patients on April 1, 1946. It has an accommodation of 120 beds. It is proposed to increase accommodation in this temporary sanatorium to 250 beds. Meanwhile, every endeavour is being made to find a suitable site for a large sanatorium.

(3) Thirty beds were added to the In-patient section of Damietta Dispensary, the maintenance of which was borne by the Society for the Welfare of patients' families, thus bringing the total number of beds to 65. It is proposed to construct a special dispensary to cater for the ever increasing number of patients. Thirty more in-patient beds in Assiut dispensary and 20 in Fayoum were provided for in the 1945/1946 budget. This brings the total number of beds in the former to 50 and in the latter to 35.

(4) In its sitting of November 9, 1946, the Council of Ministers approved the distribution of L.E. 1,000 amongst destitute chest diseases patients in commemoration of H.M. the King's escape from the 1943 incident at Kassassin.

(5) In its sitting of December 2, 1945, the Council of Ministers entrusted the Ministry of Social Affairs with the distribution of the sum of L.E. 5,457 contributed by Provincial Councils in aid of destitute chest diseases patients. The credits in aid of the chest diseases patients provided in the budget were raised from L.E. 5,000 to L.E. 10,000. A total of L.E. 14,517.143 mills. were distributed amongst 1,417 families of destitute patients this year.

(6) At the end of the year, there were 60 convalescents in residence at Marg Village Settlement working in its various workshops. A social service specialist was appointed on October 31, 1946, to promote the social life of convalescents, settle their problems and instruct them in how to escape a relapse. A club and a cooperative society have been provided this year for the welfare of the patients.

(7) It was decided to hold a monthly meeting at Dar el Hikma, Cairo to be attended by all chest diseases medical officers from all parts of the country where they would discuss medical, technical and social questions and other problems which each encounters in his particular unit. Lectures on important subjects would also be given to raise their standard of knowledge and to acquaint them with new developments in chest diseases treatment technique. The first of these meetings was held on October 15, 1946, and at monthly intervals thereafter.

TABLE NO. 26.— THE FOLLOWING IS A LIST OF THE DIFFERENT FORMS OF TREATMENT FOLLOWED
IN THE DISPENSARIES AND THE RESULTS THEREOF.

DOMICILIARY TREATMENT					ARTIFICIAL PNEUMOTHORAX					
				Number					Total Number	
CONDITION ON 1ST EXAMINATION IN DISPENSARY	Tuberculous patients			11,587	No. of patients treated with A.P. 2,337					
	Sputum	Positive	8,319	No. of 1st Inductions				615		
		Negative	3,268	No. of Refills				34,055		
	Lesion	Unilateral	6,504	CONDITION BEFORE TREATMENT	Sputum	Positive... ..	1,853			
		Bilateral	5,083			Negative	484			
		Cavitary	4,052		Lesion	Unilateral	1,863			
	Last Sputum Ex.	Positive... ..	6,694			Bilateral	474			
		Negative	4,893			Cavitary	1,369			
	Increase of weight... ..			5,267	Haemoptysis				259	
	Decrease of weight... ..			2,864	Unilateral A.P.				2,171	
Stationary... ..			2,335	Bilateral A.P.				174		
RESULT OF TREATMENT	Died			1,121	Extrapleural A.P.				11	
	Unable to work			3,020	Continued refills				1,900	
	Walking			3,868	STOPPED A.P. & CAUSE	Adhesions				119
	Light work			2,836		Bilateralisation				122
	Full work... ..			742		Effusion				212
					RESULT OF TREATMENT	Sputum still positive				1,061
						Sputum still negative				386
				Sputum returned negative				810		
				Sputum returned positive... ..				80		
				Increase of weight				1,289		
				Decrease				450		
				Stationary				369		
				Died				199		
				Incapable of work				631		
				Walking				585		
				Light work				768		
				Full work				154		

TABLE NO. 27.—STATISTICS OF PATIENTS IN SANATORIA AND IN-PATIENT SECTIONS OF DISPENSARIES
(MANSOURA, ZAGAZIG, DAMIETTA, DAMANHOUR, TANTA, PORT SAID, FAYOUM,
ASSIUT, SHERBIN, MINIA AND ASWAN) IN 1946

						Sanatoria				In-patient Sections in Dispensaries
						Helwan	Abbassia	Giza	Alex.	
BEFORE ADMISSION	No. of patients discharged					1,365	954	407	187	804
	Sputum	Positive				777	717	231	142	581
		Negative				588	237	176	45	223
	Lesion	Unilateral				519	317	338	108	411
		Bilateral				615	637	69	79	245
	Temperature	Cavitary				522	641	127	45	431
		Normal				885	409	280	91	394
		Abnormal				480	545	127	96	410
	General treatment					519	954	249	118	516
	Exercise					482	357	234	69	247
TREATMENT GIVEN	Gold therapy	No. of patients			—	37	—	—	—	
		No. of injections			—	328	—	—	—	
	Tuberc. Inj.	No. of patients			—	1	—	—	—	
		No. of Injections... ..			—	2	—	—	—	
	A. P.	Inductions			293	511	58	87	306	
		Refills			5,423	7,465	2,821	1,232	8,586	
	Extrapleural A.P.					1	—	—	—	1
	Phrenic Crush					1,905	156	32	—	18
	Pleuratomy... ..					9	2	1	—	—
	Aspiration					82	104	35	28	87
CAUSES OF DISCHARGE	Thoracoplasty					8	41	11	—	—
	Adhesiotomy					200	275	34	—	49
	Complications					—	112	24	35	67
	No. of other injections given					1,367	5,514	1,467	798	1,194
	Pts. went on leave and did not return					62	19	22	32	19
	At their own request	Pts. refused treatment			516	458	180	42	73	
		Pts. having special difficulties			150	51	11	25	252	
	Consent of Physician					637	340	194	88	460
	CONDITION ON DISCHARGE	Weight	Increase of weight			980	536	235	102	502
			Decrease of weight			292	156	114	30	119
Stationary			93	262	58	5	83			
Temperature		Normal			991	620	286	141	583	
		Abnormal			374	327	121	46	221	
Spu'um		Still positive			623	347	235	78	439	
		Still negative			572	192	95	32	172	
		Became negative			43	359	73	54	152	
		Became positive			127	56	4	23	41	
Successful A.P. continued					293	432	142	57	428	
A.P. failed					81	71	16	30	90	
Condition improved					802	551	238	102	537	
Condition worse					120	70	19	23	76	
Condition stationary					310	247	131	55	169	
Died					133	86	19	7	22	
Ability to Work	Working	Fully			5	14	19	16	31	
		Partially			570	326	170	100	441	
	Incapable			657	528	199	64	310		
Average duration of stay in days					131	179	128	92	1,281	
Patients stayed 6 months or more					530	193	102	62	166	
Patients stayed less than 6 months					835	761	305	125	638	

TABLE No. 28. — SHOWING NUMBER OF T.B. POSITIVE CASES NOTIFIED BY THE DISPENSARIES DURING THE YEAR 1946 ACCORDING TO RESIDENCE

Unit	Cairo	Alexandria	Damietta	Port-Said	Canal, Suez and Ismailia	Behera	Gharbia	Menoufia	Dakahlia	Sharbia	Kalubia	Giza	Bent-Suef	Fayoum	Minia	Assiut	Girga	Qena	Aswan	Oases	Total
Boulac	667	5	—	—	5	—	9	12	13	14	51	9	5	—	—	6	4	18	5	—	823
Mobtadayan	719	5	—	—	18	—	10	12	24	17	38	209	3	1	—	2	2	3	7	—	1,070
Khalifa	350	15	—	12	35	18	63	—	—	—	54	6	8	29	63	40	—	14	16	—	723
Damanhour	—	6	—	—	—	315	72	5	—	—	—	—	—	—	—	—	—	—	—	—	398
Alexandria	—	693	—	—	—	26	3	—	—	—	—	—	—	—	—	—	—	—	—	—	722
Tanta	—	—	—	—	—	7	218	29	57	1	1	—	—	—	—	—	—	—	—	—	313
Mansoura	2	—	—	—	—	—	114	—	407	1	—	—	—	—	—	—	—	—	—	—	524
Shebin el Kom	—	—	—	—	—	—	7	228	—	—	19	—	—	—	—	—	—	—	—	—	254
Mehalla el Kobra	—	—	—	—	—	—	303	1	16	—	—	—	—	—	—	—	—	—	—	—	320
Zagazig	—	—	—	—	33	—	11	—	44	313	14	3	—	—	—	—	—	—	—	—	418
Damietta	—	—	153	—	6	—	63	—	258	3	—	—	—	—	—	—	—	—	—	—	483
Port Said	—	—	—	300	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	300
Sherbin	—	—	—	—	—	—	90	—	33	—	—	—	—	—	—	—	—	—	—	—	123
Fayoum	—	—	—	—	—	—	—	—	—	—	—	—	72	202	—	—	—	—	—	—	274
Minia	—	—	—	—	—	—	—	—	—	—	—	2	1	—	200	22	—	—	—	—	223
Assiut	—	—	—	—	—	—	1	—	—	—	—	—	—	—	2	206	25	10	—	—	246
Souhag	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	—	—	—	10
Qena	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	156	—	—	156
Aswan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	119	—	119
TOTAL ...	1,738	724	153	312	97	366	964	287	852	349	177	229	89	232	265	276	41	201	147	—	7,499

TABLE NO. 29. — DEATHS REPORTED BY THE DISPENSARIES
DURING 1946 ACCORDING TO AGE.

Dispensary	1-5 Years	5-15 Years	15-25 Years	25-35 Years	35-45 Years	Over 45 Years	Total
Boulac	7	20	24	28	16	7	102
Mobtadayan	6	24	107	68	27	11	243
Khalifa	5	16	91	91	93	103	399
Tanta	2	5	8	11	17	21	64
Damanhour	—	1	5	7	8	4	25
Alexandria	3	5	35	28	24	9	104
Mensoura	3	17	26	28	10	1	85
Shebin el Kom	—	1	9	12	4	3	29
Mehalla el Kobra	—	3	10	17	15	8	53
Zagazig	1	—	9	39	4	6	59
Damietta	3	7	35	27	21	5	98
Port Said	—	4	2	31	27	19	83
Sherbin	—	1	3	7	3	—	14
Fayoum	—	9	17	21	10	6	63
Minia	3	8	27	12	9	3	62
Assiut	1	2	9	1	2	3	18
Souhag	—	—	—	—	—	—	—
Qena	—	3	6	9	2	5	25
Aswan	—	—	7	7	8	4	26
TOTAL	34	126	430	444	300	218	1,552

TABLE NO. 30.—NUMBER OF CHEST DISEASES UNITS
SINCE 1929

Year	Chest Diseases Dispensaries			Chest Sanatoria	T.B. Bone Sanatoria	Preventoria	Village Settlements
	Dispensaries	Branches	In-Patient Sections				
1929	2	—	—	—	—	—	—
1930	3	—	—	—	—	—	—
1931	3	—	—	—	—	—	—
1932	3	—	—	—	—	—	—
1933	4	—	—	—	—	—	—
1934	4	—	—	1 ⁽¹⁾	—	—	—
1935	5	—	—	1	—	—	—
1936	6	—	—	1	1 ⁽²⁾	—	—
1937	8	—	—	1	1	—	—
1938	12	—	2	2	1	1	—
1939	13	—	2	2	1	1	—
1940	14	—	4	2	1	4	—
1941	14	1	4	2	1	4	—
1942	15	3	6	2	2	4	—
1943	15	3	6	2	2	4	1
1944	16	4	8	3	2	4	1
1945	17	4	10	3	2	4	1
1946	19	12	12	4	2	4	1

N.B.—⁽¹⁾ Fouad Sanatorium, Helwan, was attached to this Section in September 1934.

⁽²⁾ Maritime Sanatorium, Alexandria, was attached to this Section in September 1936.

TABLE No. 31.—ANNUAL RETURN OF CASES ADMITTED TO MARG T.B. CONVALESCENT COLONY DURING THE YEAR 1946

Month	No. of new Convalescents	Ages					Industries						Health Condition still under Treat.	Kind of Relation							Occasional Disease		Discharged		Referred to Sanatorium		REMARKS
		Below 20 Years	20-29 Years	30-39 Years	40-49 Years	Above 50 Years	Tailor	Carpenter	Shoe-Maker	Tin-smith	Peasant	Other Industries		Father	Mother	Wife	Son	Brother	Sister	Other Relatives	Convales.	Contacts	Convales.	Contacts	Convales.	Contacts	
January ...	1	—	1	—	—	—	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—		
February ...	1	—	—	—	1	—	—	1	—	—	—	—	1	—	2	—	—	1	—	—	—	—	—	—	—		
March ...	4	1	1	1	1	—	—	1	1	—	2	—	2	1	1	—	—	—	—	—	—	—	—	2	—		
April ...	1	—	1	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	2	—	—	—	1	—		
May ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—		
June ...	1	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	1	—		
July ...	1	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	2	—	—	2	5	1	—		
August ...	1	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	2	3	—	—	—		
September ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
October ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
November ...	1	—	—	1	—	—	—	—	—	—	—	—	1	—	—	2	—	—	—	—	—	—	—	2	—		
December ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
TOTAL ...	11	1	5	3	2	—	1	1	5	2	—	2	6	3	5	7	—	3	2	2	—	4	8	9	—		

No. of Convales. on 1st. Jan. 1946... 59
" " admitted during 1946 11

No. of Convales. discharged during 1946 4
" " on Dec. 31, 1946. 66

TABLE NO. 32.— ANNUAL RETURN OF THE WORK OF

Preventorium	Dis- charged		Diseases attacked children during their residence							NEW CHILDREN										
										Mantoux Test in Child			Their Relative Patients							
	Condition				Relation															
	Died	Discharged	Other diseases	Chest	Ophthalmic	Intestinal	Stomach	Skin	Not Done	Pos.	Neg.	+ X.R.	+ Sputum	Alive	Died	Other relatives	Sister	Brother	Mother	Father
Zeitoun Preventorium... ..	23	77	49	41	6	35	31	31	28	53	15	56	40	94	2	1	2	3	44	46
Marg "	—	16	6	—	—	1	—	7	—	—	3	14	1	15	—	1	—	2	4	8
Alexandria "	3	50	—	—	—	—	—	—	—	36	—	34	34	34	2	—	—	3	12	21
Assiut "	—	26	13	—	17	—	4	8	—	11	5	8	8	25	—	2	—	1	15	7
TOTAL	26	169	68	41	23	36	35	46	28	100	23	112	83	168	4	4	2	9	75	82

N.B.—

	Zeitoun	Marg	Alex.	Assiut
Number of Children on January 1, 1946 ...	88	44	48	33
" " admitted during the year ...	96	15	36	25
" " discharged " " ...	100	16	53	26
" " on December 31, 1946	84	43	31	32

TABLE NO. 33.— ANNUAL RETURN OF CASES TREATED IN ALEXANDRIA MARITIME SANATORIUM AND

OUT-PATIENT SECTION																				
New Patients											Old Patients									
Total	Ages						Cases				Total	Cases				Treatment		Dressings	Minor Operations	X-Rays
	Under 5 years		5-10 years		Over 10 years		Rickets	T.B. Spine	T.B. Bones and Joints	Other diseases		Rickets	T.B. Bones	T.B. Spine	Other diseases	By Electricity	By Ultra violet			
	M.	F.	M.	F.	M.	F.														
341	41	32	35	34	109	90	5	48	53	235	297	3	75	19	200	19	64	214	61	82
477	20	15	54	28	214	146	11	187	210	69	702	41	314	303	44	—	—	—	—	—
818	61	47	89	62	323	236	16	235	263	304	999	44	389	322	244	19	64	214	61	82

N.B.—

	Alexandria	Helwan
Number of patients on January 1, 1946 ...	76	111
" " " admitted during the year ...	185	217
" " " discharged " " " ...	182	197
" " " on December 31, 1946	79	131

THE PREVENTORIA DURING THE YEAR 1946

ADMITTED																								No. of new children
AGES																								
11-12 years		10-11years		9-10 years		8-9years		7-8 years		6-7 years		5-6 years		4-5 years		3-4 years		2-3 years		1-2 years		less than one year		
F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	
1	1	3	2	3	2	5	3	3	4	4	1	6	8	3	3	5	2	2	1	2	4	13	15	96
—	—	1	1	—	3	—	2	—	2	—	2	—	2	—	1	—	1	—	—	—	—	—	—	15
1	1	—	—	—	5	4	—	2	2	3	2	1	—	—	5	2	1	—	1	—	—	2	4	36
—	—	—	—	—	—	—	—	2	—	2	—	1	3	2	—	1	2	2	1	—	1	1	7	25
2	2	4	3	3	10	9	5	7	8	9	5	8	13	5	9	8	6	4	3	2	5	16	26	172

PRINCESS KHADIGA ABBAS HALIM HOSPITAL FOR BONE DISEASES AT HELWAN DURING THE YEAR 1946

IN-PATIENT SECTION																							
New Patients												Discharged											
Total	Ages						T.B. Spine	T.B. Hip	T.B. Knee	T.B. other joints	Other diseases	Total	Result					Treatment		Major Operations	Plaster	X-Ray	Unit
	Under 5 years		5-10 years		Over 10 years								Died	Cured	Stationary	Improved	Discharged in plaster	By Electricity	By Ultra Violet				
	M.	F.	M.	F.	M.	F.																	
185	16	10	27	17	67	48	87	35	18	37	8	182	6	27	18	49	82	—	252	43	144	203	Alexandria Maritime Sanat.
217	8	1	42	16	95	55	78	35	21	56	27	197	—	90	36	62	9	—	162	39	104	898	Princess Khadiga Abbas Halim Hosp. for Bone-diseases at Helwan
402	24	11	69	33	162	103	165	70	39	93	35	379	6	117	54	111	91	—	414	82	248	1101	

TABLE NO. 34.—ANNUAL RETURN OF CHEST

Dispensary	New Cases seeking Treatment (Dispensary)	(New T.B. Cases in the Dispensary) or (New Patients admitted)																				Profession		
		T.B. Cases			Other Chest Diseases	Age Groups														Vendors	Officials	Workmen		
		Total	Sputum+	X-Ray+		From 1-9 Years		From 10-19 Years		From 20-29 Years		From 30-39 Years		From 40-49 Years		From 50-59 Years		Over 60 Years						
						M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.					
Boulac	9,705	823	630	193	8536	14	16	85	64	241	109	123	54	53	18	28	11	6	1	37	60	331		
Mobtadayan	10,072	1070	757	313	9001	36	19	85	62	241	122	200	101	104	39	32	17	6	6	54	98	342		
Khalifa	8,058	723	529	194	7335	12	18	88	50	205	107	84	38	41	33	22	9	13	3	73	55	270		
Damanhour	5,923	398	347	51	5525	7	3	38	23	109	31	79	40	36	9	15	5	3	—	19	38	77		
Alexandria	9,596	722	574	148	8874	12	2	87	58	213	68	108	45	758	22	22	2	10	5	52	53	319		
Tanta	12,471	313	228	85	12158	3	5	17	18	65	30	66	35	36	13	22	3	—	—	19	19	75		
Mansoura	9,049	524	338	186	8525	6	9	61	49	128	45	91	45	45	15	13	9	8	—	30	26	104		
Shebin El Kom	7,747	254	145	109	7493	5	5	23	19	45	19	45	41	19	18	11	2	2	—	7	12	37		
Mehalla El Kobra... ..	9,946	320	209	111	9629	4	10	25	23	71	24	71	32	24	19	6	7	3	1	8	7	103		
Zagazig	12,578	418	328	90	12160	6	4	39	13	114	23	83	51	35	25	12	7	3	3	19	15	102		
Damietta	9,775	483	299	184	9292	19	15	43	41	120	70	61	47	36	7	11	6	7	—	26	15	118		
Port Said	8,021	300	193	107	7721	22	28	30	30	46	28	50	14	20	11	8	6	2	5	32	31	92		
Sherbin	3,304	123	80	43	3181	2	1	15	4	14	4	34	18	22	4	2	3	—	—	7	5	21		
Fayoum	6,851	274	269	5	6279	2	—	17	11	73	29	61	33	27	9	6	4	1	1	14	16	33		
Minia	4,686	223	85	138	4463	8	4	16	6	33	10	38	33	31	17	11	6	8	2	15	22	40		
Assiut	4,435	246	180	66	4189	6	5	19	13	45	43	37	25	22	16	4	7	4	—	4	16	40		
Sohag	491	10	3	7	457	—	—	—	1	2	1	4	—	1	1	—	—	—	—	1	—	2		
Qena	2,907	156	125	31	2751	5	—	7	6	34	16	43	7	20	4	6	—	5	3	6	11	33		
Aswan	1,705	119	48	71	1586	1	—	4	12	28	12	27	6	6	8	8	3	3	1	8	7	26		
TOTAL	137320	7499	5367	2132	129155	170	144	699	503	1827	791	1305	665	646	288	239	107	84	31	431	506	2165		

Dispensary	X-Ray Exam.		Exam. of (Sanat.)				Old Cases (Disp.)				Visits (Disp.)		Discharge							
	OLD Patients			Teeth	Nose	Throat	Ears	Total	T.B. Cases	Under Observation	Contacts	Other Chest Diseases	Nurse Visits	M.O. Visits	Total	Sputum on Discharge		Improved	Stationary	Worse
	Pts.	Under Observ														Pos.	Neg.			
		No.	No.																	
	No.	No.	Pos.																	
Boulac	117	—	—	—	—	—	—	7,982	5,394	711	610	1,267	2,132	403	465	249	216	222	88	97
Mobtadayan	88	1	—	—	—	—	—	10,847	8,327	1,091	847	582	2,944	403	388	205	183	213	87	58
Khalifa	2	230	7	—	—	—	—	6,946	4,548	1,190	1,046	162	1,368	341	426	211	215	189	100	104
Damanhour	136	2	—	—	—	—	—	4,583	1,818	113	103	2,549	1,184	511	107	67	40	68	22	12
Alexandria	23	2	—	—	—	—	—	20,867	14,741	4,001	702	1,423	1,906	363	208	101	107	127	43	37
Tanta	50	4	—	—	—	—	—	10,998	4,157	919	548	5,374	1,445	337	145	82	63	82	39	10
Mansoura	141	90	1	—	—	—	—	3,475	3,214	193	44	24	1,527	455	198	98	100	103	62	20
Shebin El Kom	21	5	—	—	—	—	—	6,732	3,319	478	263	2,672	722	327	57	30	27	26	15	1
Mehalla El Kobra... ..	64	6	—	—	—	—	—	6,311	3,431	411	262	2,207	1,525	339	78	38	40	37	26	1
Zagazig	106	3	—	—	—	—	—	16,083	7,666	1,749	1,227	5,421	1,100	188	143	77	66	79	37	2
Damietta	426	12	—	548	—	—	—	90,10	6,587	212	111	2,100	2,260	575	257	180	77	205	23	1
Port Said	141	86	5	—	—	—	—	10,225	1,333	459	487	7,946	1,217	346	108	59	49	40	64	—
Sherbin	17	—	—	—	—	—	—	1,422	411	43	52	916	350	133	30	18	12	14	10	—
Fayoum	49	2	—	—	—	—	—	5,207	2,139	298	358	2,412	1,837	514	51	33	18	31	13	—
Minia	90	11	—	—	—	—	—	10,325	2,397	1,355	675	5,898	2,208	447	47	26	21	29	13	—
Assiut	90	22	—	6	6	6	6	2,952	2,290	213	182	267	1,428	390	115	72	43	62	29	1
Souhag	1	—	—	—	—	—	—	193	3	6	—	184	—	—	—	—	—	—	—	—
Qena	12	3	1	—	—	—	—	3,314	774	113	79	2,348	677	419	22	15	7	6	9	—
Aswan	69	3	—	—	—	—	—	2,189	439	169	95	1,486	848	259	62	21	41	32	21	—
TOTAL	1643	482	14	554	6	6	6	139661	73008	13724	7691	45238	26678	6759	2907	1582	1325	1565	706	4

DISEASES DISPENSARIES DURING THE YEAR 1946

to Sanatorium)										New Contacts (Disp.)			Cases under Observation (Disp.)	Hamoptysis	Sputum Examination				X-Ray Examination		
sions			(Disp.)		Classes (Sanat.)				Children	Adults	T.B. Contacts	Total of Sputum			Sputum of New Cases		Sputum of Old Cases		Total of X-Ray	New Cases	
Peasants	Students	No Occupation	Cases recorded for Sanat.	Cases admitted to Sanat.	1st	2nd	3rd Paying	3rd Gratis							No.	Pos.	No.	Pos.		No.	Pos.
71	27	297	510	392	—	—	—	—	388	398	26	300	—	1,941	1,596	630	345	96	1,041	924	463
138	30	408	646	448	—	—	—	—	466	570	47	201	45	1,611	1,402	757	209	55	818	729	272
31	43	251	430	264	—	—	—	—	308	338	—	—	2	1,849	1,292	529	557	156	949	717	646
135	1	128	188	73	—	—	—	73	118	114	11	79	5	760	475	347	285	196	621	483	395
38	10	250	349	283	—	—	—	—	383	420	13	121	—	2,913	1,429	574	1,484	331	510	485	317
77	1	122	176	136	—	—	—	62	182	221	6	113	60	802	521	228	281	134	439	385	241
144	18	202	399	307	—	—	—	80	73	273	25	23	20	1,201	712	338	489	284	431	200	132
73	13	112	88	62	—	—	—	—	110	133	3	—	—	686	500	145	186	36	181	155	121
64	9	129	121	84	—	—	—	—	159	231	11	92	3	554	371	209	183	60	442	372	278
130	14	138	213	163	—	—	—	65	174	312	18	142	34	1,231	777	328	454	150	586	477	296
102	4	218	511	169	—	—	—	168	111	166	13	131	3	1,165	909	299	256	155	1,304	866	400
19	11	115	118	138	—	—	—	78	129	225	23	2	—	518	287	193	231	131	517	290	253
51	3	36	57	49	—	—	—	44	36	71	3	20	2	258	169	80	89	28	111	94	70
110	4	97	60	60	—	—	—	60	79	136	6	107	47	909	571	269	338	115	95	44	35
51	5	90	66	46	—	—	—	46	89	180	5	156	2	657	291	85	376	125	459	358	129
97	12	77	125	125	—	—	—	125	85	107	—	16	35	1,001	459	180	542	258	299	187	134
3	1	3	—	6	—	—	—	10	1	3	—	20	—	39	33	3	6	2	31	30	10
54	6	46	43	15	—	—	—	—	133	299	—	3	—	316	239	125	77	32	168	153	42
20	3	55	32	50	—	—	—	48	14	15	—	27	—	194	86	48	108	53	151	79	62
408	215	2774	4932	2870	—	—	—	859	3038	4222	210	1551	258	18615	12119	5367	6496	2397	9153	7028	4296

Patients				Treatment					Operations												No. of Deaths
Died	Ability to Work			Tuberculin	Gold	Other Injections	Exercise Treatment	General Treatment	Aspiration	Intrapleural Pneumothorax		Internal Pneumonolysis	Phrenic Operations	Extrapleural Pneumothorax		Plombage Oleothorax	Thoracoplasty	Thoracotomy	Pleural Lung Drainage	Refused admission to Sanatorium	
	Complete	Partial	Unable							Induction	Refills			Induction	Refills						
58	7	261	139	—	—	—	—	—	2	—	868	—	—	—	—	—	—	—	—	—	102
33	5	206	144	—	—	—	—	—	25	—	2969	—	—	—	—	—	—	—	—	—	243
33	38	221	134	—	—	—	—	—	5	—	1956	—	—	—	—	—	—	—	—	—	399
5	—	60	42	—	—	—	60	107	—	62	2455	—	—	—	3	3	—	—	—	—	25
7	24	73	104	—	—	—	—	—	6	—	1866	—	—	—	—	—	—	—	—	—	104
8	3	47	87	—	—	—	—	—	2	25	1652	—	—	—	—	—	—	—	—	—	64
7	9	80	102	—	—	177	—	—	13	5	1858	—	—	—	—	—	—	—	—	—	85
1	2	22	32	—	—	2	—	1	9	5	482	—	—	—	17	—	—	—	1	—	29
3	1	42	32	—	—	130	—	—	14	—	525	—	—	—	—	—	—	—	—	—	53
1	—	70	72	—	—	—	—	—	—	35	1552	—	—	—	—	—	—	—	—	—	59
6	4	69	178	—	—	169	101	193	61	213	5285	—	—	—	—	—	—	—	—	—	98
4	17	35	52	—	—	9	13	—	52	115	1837	—	—	—	—	—	—	—	—	—	83
2	—	17	11	—	—	113	—	—	5	14	186	—	—	—	—	—	—	—	—	—	14
—	—	29	22	—	—	79	—	—	18	28	1037	—	—	—	—	—	—	—	—	—	63
4	—	25	18	—	—	—	—	—	13	24	613	—	—	—	—	—	—	—	—	—	62
6	3	66	40	—	—	—	—	—	19	30	522	—	—	—	—	—	—	—	—	—	18
—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
2	—	9	11	—	—	—	—	—	3	9	323	—	—	—	—	—	—	—	—	—	25
2	—	45	15	—	—	—	—	—	1	8	325	—	—	—	—	—	—	—	—	—	26
182	113	1377	1235	—	—	679	174	301	250	573	26311	—	—	—	20	3	—	—	1	—	1552

TABLE NO. 35—ANNUAL RETURN OF SANATORIA AND

(New T.B. Cases in the Dispensary) or (New Patients admitted

Branches	New Cases Seeking Treatment (Dispensary)	(New T.B. Cases in the Dispensary) or (New Patients admitted																				
		T.B. Cases			Other Chest Diseases	Age Groups														Profes		
		Total	Sputum +	X-Ray +		From 1-9 Years		From 10-19 Years		From 20-29 Years		From 30-39 Years		From 40-49 Years		From 50-59 Years		Over 60 Years		Vendors	Officials	Workmen
						M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.				M.	F.
Shobrakhit	326	9	8	1	317	—	—	2	—	3	1	2	—	—	1	—	—	—	—	—	1	1
Mit Ghamr	1876	30	23	7	1837	—	—	4	2	5	3	4	4	4	—	1	1	—	—	2	1	7
Simbellawein... ..	369	5	3	2	364	—	—	—	—	1	1	—	1	1	—	1	—	—	—	—	—	—
Menouf	1084	22	14	8	1062	—	—	3	1	4	7	6	—	—	—	—	—	—	—	—	—	4
Benha	1216	23	9	14	1103	—	2	—	4	4	2	5	1	1	3	1	—	—	—	—	3	3
Kafr El Sheikh	526	12	8	4	514	—	1	—	1	2	2	1	—	1	3	1	—	—	—	1	—	2
Faraskour	945	4	2	2	941	—	—	—	—	3	—	—	1	—	—	—	—	—	—	—	1	—
Dikernes	1054	11	7	4	1043	—	—	1	—	—	—	4	5	—	—	—	1	—	—	—	—	1
Etsa	61	—	—	—	61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Samallout	690	8	2	6	682	—	—	—	1	—	—	—	2	1	2	—	1	1	—	—	2	—
Luxor	974	61	45	16	913	3	—	4	2	13	1	27	4	7	1	2	—	2	1	3	4	12
Nag Hamadi	397	2	2	—	395	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Fonad Sanat.... ..	1368	1368	916	452	—	6	8	189	102	471	167	206	77	79	30	22	7	4	—	90	192	406
Abbassia Hospital	956	939	695	244	17	40	31	84	126	229	197	78	83	30	35	13	5	4	1	32	62	205
Giza Sanat.	407	385	274	111	22	—	—	28	—	208	—	115	—	42	—	10	—	4	—	32	31	200
Alexandria Sanat...	305	285	231	54	20	—	—	31	27	137	31	42	11	17	2	6	1	—	—	35	29	148
TOTAL ...	2036	2977	2116	861	59	46	39	332	255	1045	395	441	171	108	67	51	13	12	1	189	314	959

Branches				Exam of (Sanat)				Old Cases (Disp.)					Visits (Disp.)		Discharge					
	OLD Patients			Teeth	Nose	Throat	Ears	Total	T.B. Cases	Under Observation	Contacts	Other Chest Diseases	Nurse Visits	M.O. Visits	Total	Sputum on Discharge		Improved	Stationary	Worse
	Pts.	Under Observ.														Pos.	Neg.			
		No.	No.																		Pos.	Neg.
Shobrakhit	—	—	—	—	—	—	—	309	1	—	—	308	—	—	—	—	—	—	—	—
Mit Ghamr	—	—	—	—	—	—	—	710	168	30	31	481	—	—	—	—	—	—	—	—
Simbellawein	—	—	—	—	—	—	—	26	26	—	—	—	—	—	—	—	—	—	—	—
Menouf	—	—	—	—	—	—	—	148	82	2	2	62	71	64	4	3	1	—	2	1
Benha	—	—	—	—	—	—	—	253	211	3	—	39	31	26	3	1	2	2	—	1
Kafr El Sheikh	—	—	—	—	—	—	—	158	32	3	5	118	2	2	—	—	—	—	—	—
Faraskour	—	—	—	—	—	—	—	—	—	—	—	—	8	8	—	—	—	—	—	—
Dikernes	—	—	—	—	—	—	—	282	64	21	19	178	—	—	1	—	1	—	1	—
Etsa	—	—	—	—	—	—	—	37	10	1	—	26	57	57	—	—	—	—	—	—
Samallout	—	—	—	—	—	—	—	1381	134	53	26	1168	219	118	—	—	—	—	—	—
Luxor	4	1	—	—	—	—	—	945	297	12	15	621	189	121	4	4	—	—	3	—
Nag Hammadi	—	—	—	—	—	—	—	222	16	11	6	189	—	—	1	1	—	—	—	1
Fouad Sanat																				
Helwan	1783	—	—	289	319	330	311	—	—	—	—	—	—	—	1365	777	588	802	310	120
Abbassia Hospital	1625	30	—	412	761	761	761	—	—	—	—	—	—	—	954	637	317	551	247	70
Giza Sanat.	258	4	—	141	304	304	304	—	—	—	—	—	—	—	407	231	176	232	139	18
Alexandria Sanat....	67	117	107	—	—	—	—	—	—	—	—	—	—	—	187	110	77	102	55	23
TOTAL ...	3733	151	107	842	1384	1395	1376	—	—	—	—	—	—	—	2913	1755	1155	167	751	231

	Helwan Sanat.	Abbassia Hosp.	Giza Sanat.	Alexandria Sanat.	Damanhour	Tanta	Mansoura
No. of Pts. on 1st Jan. 1946.	498	455	137	—	19	19	25
No. of Pts. admitted during year... ..	1368	956	407	305	73	62	80
No. of Pts. discharged during year... ..	1365	954	407	187	72	63	83
Average duration of stay	102	149	128	92	100	104	90
No. of Pts. on Dec 31 1946.	501	457	137	118	20	18	22

CHEST DISEASES DISPENSARY BRANCHES DURING THE YEAR 1946

to Sanatorium)										New Contacts (Disp.)			Cases under Observation (Disp.)	Hæmoptysis	Sputum Examination					X-Ray Examination		
soins			(Disp.)		Classes (Sanat.)				Children	Adults	T.B. Contacts	Total of Sputum			Sputum of New Cases		Sputum of Old Cases		Total of X-Ray	New Cases		
Peasants	Students	No Occupation	Cases recorded for Sanat.	Cases admitted to Sanat.	1st	2nd	3rd Paying	3rd Gratis							No.	Pos.	No.	Pos.		No.	Pos.	
5	—	2	—	—	—	—	—	—	—	—	—	3	—	16	16	9	—	—	14	14	11	
6	—	14	—	9	5	—	—	2	3	5	—	6	2	56	55	23	1	—	31	31	23	
3	—	2	—	—	—	—	—	—	—	—	—	—	—	13	13	3	—	—	—	—	—	
5	4	9	—	1	4	—	—	—	—	—	—	—	—	16	16	14	—	—	—	—	—	
6	—	11	—	—	4	—	—	—	—	1	—	—	—	14	14	9	—	—	7	7	7	
1	2	6	—	—	—	—	—	—	—	1	—	—	—	13	13	8	—	—	1	1	1	
—	—	3	—	—	—	—	—	—	—	1	—	—	—	15	15	2	—	—	—	—	—	
5	2	3	—	4	2	—	—	2	—	—	—	2	—	11	11	7	—	—	8	8	8	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	4	—	1	—	—	—	—	
1	—	5	—	—	—	—	—	—	3	3	—	—	—	—	—	—	—	—	—	—	—	
22	3	17	—	10	4	—	—	—	72	150	—	3	—	102	78	45	24	12	57	52	17	
—	—	1	—	1	—	—	—	—	3	5	—	—	—	9	9	2	—	—	—	—	—	
120	128	432	—	—	—	77	118	1173	—	—	—	—	37	6137	1368	826	4769	2557	2310	527	527	
55	74	528	—	—	—	42	77	837	—	—	—	—	384	4017	956	695	3061	729	2541	886	798	
142	—	2	—	—	—	—	—	407	—	—	—	111	—	1425	407	274	1018	580	550	288	285	
12	7	84	—	—	—	—	10	295	—	—	—	—	135	1080	305	231	775	323	306	122	107	
329	209	1046	—	—	—	119	203	2712	—	—	—	111	556	12659	3036	2026	9623	4689	5707	1823	1717	

Patients				Treatment					Operations													
Died	Ability of Work			Tuberculin	Gold	Other Injections	Exercise Treatment	General Treatment	Aspirations	Intrapleural Pneumothorax		Internal Pneumonolysis	Phrenic Operations	Extrapleural Pneumothorax		Plombage, oleothorax	Thoracoplasty	Thracotomy	Pleural Lung } Drainage	Bronchoscopy or Bronchography	Other operations	Lipiodol
	Complete	Partial	Unable							Inductions	Refills			Induction	Refills							
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—</								

in-Patient Sections								
Zagazig	Damietta	Port-Said	Sherbin	Fayoum	Minia	Assiut	Sohag	Aswan
16	32	18	—	19	16	36	—	16
65	168	78	44	60	46	125	10	48
64	145	78	29	51	44	119	—	50
125	64	45	80	146	96	100	35	100
17	55	18	15	28	18	42	10	14

Chapter VIII—VENEREAL AND SKIN DISEASES

A total of 305,393 patients attending the venereal and skin diseases units this year were found suffering from one or another of these diseases as compared with 268,763 in 1945. The increase may be attributed to the opening of new units in Old Cairo and Khalifa in Cairo Governorate and Farouk I Polyclinic in Port Said and in Kafr el Dawar, Behera Province. The effect of health propaganda on this increase cannot be overlooked.

Gonorrhoea.

The number of patients treated for gonorrhoea this year was 20,129 as against 18,127 in 1945. Chronic cases are still more prevalent amongst females than males.

Syphilis.

There were 12,053 syphilis cases under treatment during the year as against 12,129 in 1945.

Other Skin Diseases.

273,211 patients were found suffering from other skin diseases as compared with 238,507 in the previous year.

TECHNICAL ACTIVITIES

Large scale propaganda is being undertaken throughout the country stressing the grave consequences of venereal diseases. Penicillin is now being supplied to V.D. Clinics for the treatment of syphilis, gonorrhoea and certain skin diseases. 26 of the clinics are being provided with X-ray apparatus for the treatment of ringworm of the scalp, a widespread disease in Egypt. Thallium acetate is also used by all units in the treatment of this dreadful disease.

Venereal diseases units as well as village health centres are provided with Benzyl Benzoate for the treatment of scabies, another widespread disease. Data about the results of treatment of ringworm of the scalp and scabies will be compiled in due course.

During the latter part of the year, a venereal diseases preventive centre was opened in Ezbekieh quarter, Cairo. It is open day and night. Those availing themselves of this centre are by no means few, numbering 259, considering the short time it has been in operation.

TABLE No. 36.—SHOWING NUMBER OF GONORRHOEA CASES TREATED IN V.D. HOSPITALS DURING THE YEAR 1946

Hospital	Acute		Chronic		Total		Cases Cured	
	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.
Hod-el-Marsoud	—	—	396	1,536	396	1,536	382	1,588
Gabbary	—	—	76	141	76	141	76	147
TOTAL	—	—	472	1,677	472	1,677	458	1,735

TABLE No. 37.—SHOWING NUMBER OF SYPHILIS AND CHANCROID CASES TREATED IN V.D. HOSPITALS DURING THE YEAR 1946

Hospital	Primary		Second.		Latent		Tert.		Hered.		Total		Improved Cases		Chan- croid	Imp. Cases
	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.		
Hod-el-Marsoud ...	—	1	114	384	185	364	—	—	—	—	309	749	303	737	92	91
Gabbary	—	36	—	33	15	112	—	—	—	—	15	181	16	185	80	81
TOTAL	—	37	114	417	210	476	—	—	—	—	324	930	319	922	172	172

TABLE No. 38.—SHOWING DISTRICTS FROM WHICH PATIENTS CAME DURING THE YEAR 1946

Hospital	Cairo		Alex.		Port Said		Ismailia		Suez		Damietta		Quesna		Ashmoun		Tanta		Kafr el Zayat		Basyoun		Desouk		Zagazig		Abou-Hammad		Belbeis		Man-soura		Fayoum		BeniSuef	
	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.	P.	A.W.		
Hod-el-Marsoud	143	1151	—	—	69	34	15	53	—	12	—	1	—	2	—	1	12	34	—	3	—	2	—	5	42	9	—	42	—	3	75	61	28	43	—	10
Gabbary	—	—	275	980	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

TABLE No. 39.—DISTRIBUTION OF BEDS DURING 1946

Hospital	1st Class	2nd Class	3rd Class Spec.	3rd Class Ord.	Children	Opth. Branch	Total Beds for Patients	Beds for Staff	Total No. of Beds
Hod-el-Marsoud...	—	—	14	263	—	—	277	8	285
Gabbary ...	—	—	5	191	—	—	196	13	209
TOTAL ...	—	—	19	454	—	—	473	21	494

TABLE No. 39a.—NUMBER OF IN AND OUT-PATIENTS TREATED IN HOSPITALS DURING THE YEAR 1946

Hospital	In-Patients	Out-patients	No. of Visits
Hod-el-Marsoud ...	1,936	2,204	1,090
Gabbary ...	1,349	109	927
TOTAL ...	3,285	2,313	2,017

TABLE No. 40.—NEW CASES AND No. OF VISITS

Locality of Clinic	NEW CASES									
	Syphilis		Gonorrhoea		Skin Diseases		Other V. Dis.		TOTAL	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zeinab	456	323	912	767	2,250	5,974	12	106	3,630	7,170
Shubra	295	208	859	1,043	15,384	18,290	—	—	16,538	19,541
Gamalia	586	331	1,445	3,626	2,179	2,144	70	6	4,280	6,107
Abbassia	166	99	294	917	2,508	5,698	4	—	2,972	6,714
Old Cairo	28	23	56	421	359	1,234	2	—	445	1,678
Khalifa	27	33	38	451	584	2,114	—	—	649	2,598
Port-Said	178	196	240	702	2,709	3,699	4	—	3,131	4,597
Farouk 1st Polyclinic ...	29	98	22	228	596	829	—	—	647	1,155
Suez	94	97	180	1,023	3,205	4,156	20	46	3,499	5,322
Damietta	137	224	67	110	4,167	10,568	—	—	4,371	10,902
Benha	109	159	124	51	2,956	3,572	2	—	3,191	3,782
Shebin-el-Kom	236	165	163	500	4,437	5,544	2	—	3,838	6,209
Menouf	77	83	32	80	4,578	4,032	—	—	4,687	4,195
Tanta	265	280	244	541	9,177	7,456	3	—	9,689	8,277
Mehalla-el-Kobra	222	172	85	207	4,696	3,147	—	—	5,003	3,526
Zagazig	174	227	116	21	5,178	3,997	39	—	5,507	4,245
Mansoura	324	305	276	146	5,575	6,450	121	8	6,294	6,910
Mit-Ghamr	107	187	18	17	4,354	7,133	—	—	4,479	7,337
Damanhour	245	225	56	86	7,006	8,521	3	16	7,310	8,848
Kafr-el-Dawar	45	31	51	143	1,818	1,451	2	—	1,916	1,625
Giza... ..	104	122	136	207	2,723	3,675	—	—	2,963	4,004
Fayoum	308	290	214	232	2,522	3,712	—	—	3,044	4,234
Sennoris	59	82	25	211	2,131	4,592	3	21	2,218	4,906
Beni-Suef	136	63	143	357	5,111	6,468	9	—	5,399	6,888
Minia	232	166	223	1,036	3,313	5,173	34	—	3,802	6,375
Assiut	245	283	64	22	4,175	3,731	1	—	4,485	4,036
Deirut	80	93	16	5	1,992	1,836	—	—	2,094	1,934
Girga	267	176	72	66	2,612	4,501	—	—	2,951	4,743
Tahta	213	205	22	150	1,997	3,079	2	—	2,234	3,434
Suhag	210	167	68	19	3,222	2,898	—	—	3,500	3,084
Qena	205	215	31	25	1,349	2,981	7	3	1,592	3,224
Nag Hamadi	96	120	68	54	983	1,524	—	—	1,147	1,698
Luxor	199	241	64	107	1,676	2,564	—	—	1,939	2,912
Aswan	115	95	61	73	795	1,600	—	—	971	1,768
TOTAL	6,269	5,784	6,485	13,644	118,321	154,343	340	207	131,415	173,978

TO THE SKIN AND VENEREAL DISEASES CLINICS DURING 1946

NUMBER OF VISITS									
Syphilis		Gonorrhoea		Skin Diseases		Other V. Dis.		TOTAL	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
7,169	8,019	2,439	5,037	5,035	5,201	—	6	14,643	18,263
9,429	6,729	2,770	6,732	2,055	3,546	—	—	14,254	17,007
13,740	12,951	4,790	11,670	1,736	1,642	163	30	20,429	25,293
2,792	2,508	2,599	8,853	547	2,244	—	—	5,938	13,605
189	306	164	2,445	179	527	—	—	532	3,278
186	461	157	2,234	348	2,110	1	—	692	4,805
3,573	6,810	1,454	3,645	1,322	2,393	32	148	6,381	12,996
246	948	62	1,787	86	525	—	—	394	3,260
1,945	2,342	903	2,028	1,092	1,612	107	410	4,047	6,392
4,312	8,974	1,253	1,578	2,661	5,346	—	—	8,226	15,898
2,401	2,796	599	1,239	1,015	883	20	—	4,035	4,918
6,191	5,841	1,484	3,638	1,582	2,401	—	—	9,257	11,880
1,740	2,055	433	1,777	2,562	1,920	—	—	4,735	5,752
6,684	7,760	894	4,673	2,890	4,000	—	—	10,458	16,433
5,901	5,899	758	1,122	512	762	—	—	7,171	7,783
2,112	4,043	1,898	578	6,809	5,455	—	—	10,819	10,076
6,712	8,373	1,164	4,085	740	1,021	—	—	8,616	13,479
1,847	4,468	302	502	1,226	2,131	—	—	3,375	7,101
3,285	3,277	410	954	3,981	4,464	25	163	7,701	8,858
574	510	170	435	859	496	3	—	1,606	1,441
8,840	10,400	12,064	19,148	131,196	185,120	—	—	152,100	214,668
6,347	8,602	598	2,347	1,407	2,111	—	—	8,352	13,060
1,576	2,301	209	1,248	1,855	2,881	—	664	3,640	7,094
2,158	2,074	631	4,250	1,811	2,281	46	—	4,646	8,605
6,733	6,056	1,233	1,261	1,510	2,427	35	—	9,511	9,744
5,592	7,891	279	224	511	615	—	—	6,382	8,730
1,190	2,677	19	13	705	628	—	—	1,914	3,318
3,130	3,241	215	439	726	1,355	—	—	4,071	5,035
3,115	5,470	52	873	180	158	—	—	3,347	6,501
5,454	6,139	156	125	855	907	—	—	6,465	7,171
3,368	5,235	95	572	418	952	3	1	3,884	6,760
3,739	6,353	423	478	606	846	—	—	4,768	7,677
4,373	7,034	416	1,740	726	1,286	—	—	5,515	10,060
2,512	3,892	142	490	431	655	—	—	3,085	5,037
139,155	171,435	41,235	98,220	180,174	250,901	435	1,422	360,999	521,978

TABLE NO. 41. — SYPHILIS DURING THE YEAR 1946

Locality of Clinic	Syphilis												Total	
	Primary		Secondary		Tert.		Late		Herd.		Nervous			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zeinab	236	22	104	66	31	12	8	32	75	191	2	—	456	323
Shoubra	136	21	63	45	9	5	65	110	20	27	2	—	295	208
Gamalia	227	37	194	117	13	14	135	140	15	22	2	1	586	331
Abbassia... ..	69	6	22	15	15	7	48	59	8	12	4	—	16	99
Old Cairo	15	1	3	1	1	3	9	18	—	—	—	—	28	23
Khalifa	9	4	3	4	2	—	9	18	3	7	1	—	27	33
Port-Said	29	1	82	32	11	11	39	129	12	23	5	—	178	196
Farouk Ist Polyclinic	3	1	2	9	2	—	11	58	11	29	—	1	29	98
Suez... ..	24	—	25	15	17	5	21	64	4	12	3	1	94	97
Damietta	18	9	12	9	19	9	65	155	21	42	2	—	137	224
Benha	15	—	11	10	12	13	58	128	13	6	—	2	109	159
Shebin-el-Kom	132	18	30	22	7	2	46	94	21	29	—	—	236	165
Men uf	17	4	15	10	12	5	27	56	5	8	1	—	77	83
Tanta	41	15	66	35	44	21	71	169	43	40	—	—	265	280
Mehalla-el-Kobra... ..	13	—	69	20	46	20	62	112	28	19	4	1	222	172
Zagazig	79	10	48	86	17	25	27	98	3	8	—	—	174	227
Mansoura	87	16	70	65	40	31	81	153	44	40	2	—	324	305
Mit-Ghamr	11	1	20	24	21	8	29	132	25	22	1	—	107	187
Damanhour	62	16	25	27	54	26	87	141	10	14	7	1	245	225
Kafr El Dawar	5	—	14	8	7	1	16	22	2	—	1	—	45	31
Giza	30	3	22	15	12	11	29	67	10	26	1	—	104	122
Fayoum	61	12	124	104	77	110	10	17	21	28	15	19	308	290
Sennoris	10	2	26	21	8	15	5	40	10	4	—	—	59	82
Beni-Suef	56	8	61	31	1	6	10	14	6	4	2	—	136	63
Minia	80	11	67	53	9	2	52	75	20	23	4	2	232	166
Assiut	74	5	46	73	5	13	74	102	46	90	—	—	245	283
Deirout	10	7	18	11	1	2	31	51	20	22	—	—	80	93
Girga	70	3	96	30	56	35	30	92	15	16	—	—	267	176
Tahta	18	1	65	42	37	24	59	115	34	23	—	—	213	205
Suhag	32	1	54	31	31	33	50	81	43	21	—	—	210	167
Qena	17	—	42	54	9	13	86	108	51	39	—	1	205	215
Nag-Hammadi	11	1	25	11	16	16	38	85	4	7	2	—	96	120
Luxor	9	4	16	11	9	7	131	184	32	35	2	—	199	241
Aswan	31	1	9	7	17	6	28	55	25	26	5	—	115	95
TOTAL	1737	241	1549	1114	668	511	1547	2974	700	915	68	29	6269	5784

TABLE NO. 42.—GONORRHOEA DURING 1946

Locality of Clinic	Gonorrhoea						Total	
	Acute		Chronic		Urethritis			
	M.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zeinab	622	400	290	364	—	3	912	767
Shoubra	613	627	246	416	—	—	859	1,043
Gamalia	1,272	1,264	73	184	100	2,178	1,445	3,626
Abbassia... ..	190	368	49	547	55	2	294	917
Old Cairo	27	122	27	27	2	272	56	921
Khalifa	28	312	9	34	1	105	38	451
Port-Said	151	66	33	84	56	552	240	702
Farouk 1st Polyclinic...	7	39	—	—	15	189	22	228
Suez	133	24	28	—	19	999	180	1,023
Damietta	40	12	25	79	2	19	67	110
Benha	45	23	14	3	65	25	124	51
Shebin-el-Kom	125	59	19	22	19	419	163	500
Menouf	23	5	8	13	1	62	32	80
Tanta	139	44	66	457	39	40	244	541
Mehalla-el-Kobra	42	10	34	171	9	26	85	207
Zagazig	116	21	—	—	—	—	116	21
Mansoura	137	20	—	7	139	119	276	146
Mit-Ghamr	13	12	5	5	—	—	18	17
Damanhour	53	54	3	5	—	27	56	86
Kafr el Dawar	25	8	20	135	6	—	51	143
Giza	94	83	33	108	9	16	136	207
Fayoum	195	195	19	37	—	—	214	232
Sennuris	20	52	5	50	—	109	25	211
Beni-Suef	93	53	42	229	8	75	143	357
Minia	135	5	3	80	85	951	223	1,036
Assiut	50	—	1	15	13	7	64	22
Deirout	11	—	1	—	4	5	16	5
Girga	65	3	6	18	1	45	72	66
Tahta	16	—	5	132	1	18	22	150
Suhag	55	3	—	—	13	16	68	19
Qena	25	7	4	18	2	—	31	25
Nag Hammadi	32	13	21	15	15	26	68	54
Luxor	45	4	19	61	—	42	64	107
Aswan	38	3	14	2	9	68	61	73
TOTAL	4,675	3,911	1,122	3,318	688	6,415	6,485	1,3644

TABLE NO. 43.—CHANCROID, VEGEDENIC ULCER AND OTHER VENERIAL DISEASES DURING 1946

Locality of Clinic	Chancroid		Vegedenic Ulcer		Other V.D.		Total	
	M.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zeinab	—	—	—	—	12	106	12	106
Shoubra	—	—	—	—	—	—	—	—
Gamalia	70	6	—	—	—	—	70	6
Abbassia	4	—	—	—	—	—	4	—
Old Cairo	1	—	—	—	1	—	2	—
Khalifa	—	—	—	—	—	—	—	—
Port-Said	2	—	—	—	2	—	4	—
Farouk 1 Polyclinic	—	—	—	—	—	—	—	—
Suez	20	—	—	—	—	46	20	46
Damietta	—	—	—	—	—	—	—	—
Benha	1	—	1	—	—	—	2	—
Shebin-el-Kom	—	—	2	—	—	—	2	—
Menouf	—	—	—	—	—	—	—	—
Tanta	1	—	2	—	—	—	3	—
Mehalla-el-Kobra	—	—	—	—	—	—	—	—
Zagazig	12	—	27	—	—	—	39	—
Mansoura	120	9	1	—	—	—	121	9
Mit-Ghamr	—	—	—	—	—	—	—	—
Damanhour	1	—	2	—	—	16	3	16
Kafr-el-Dawar	2	—	—	—	—	—	2	—
Giza	—	—	—	—	—	—	—	—
Fayoum	—	—	1	—	—	—	—	—
Sennouris	—	—	2	—	1	21	3	21
Beni-Suef	—	—	—	—	8	—	9	—
Minia	8	—	—	—	26	—	34	—
Assiut	—	—	1	—	—	—	1	—
Deirout	—	—	—	—	—	—	—	—
Girga	—	—	—	—	—	—	—	—
Tahta	2	—	—	—	—	—	2	—
Suhag	—	—	—	—	—	—	—	—
Qena	—	—	—	—	7	3	7	3
Nag-Hammadi	—	—	—	—	—	—	—	—
Luxor	—	—	—	—	—	—	—	—
Aswan	—	—	—	—	—	—	—	—
TOTAL	244	15	39	—	57	192	340	207

TABLE No. 44.—PATIENTS COMPLETED TREATMENT DURING 1946

Locality of Clinic	Syphilis		Gonorrhoea		Chancroid		Vegedenic Ulcer		Skin Diseases		Other V. D.	
	M.	F.	M.	F.	.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zeinab ...	358	400	121	251	—	—	—	—	101	206	—	—
Shoubra	36	23	675	629	—	—	—	—	11,423	13,255	—	—
Gamalia	108	59	741	1,326	42	7	—	—	1,124	1,240	—	—
Abbassia... ..	88	63	134	291	5	—	—	—	2,332	4,997	—	—
Old Cairo	16	17	7	116	—	—	—	—	130	576	—	—
Khalifa	—	—	2	13	—	—	—	—	323	1,071	—	—
Port-Said	1	4	58	63	—	—	—	—	1,321	1,812	—	—
Farouk 1st. Polycli- nic	18	66	7	18	—	—	—	—	—	1	—	—
Suez	7	12	129	625	17	—	—	—	1,448	1,686	2	85
Damietta	—	—	36	3	—	—	—	—	4,006	7,375	—	—
Benha	61	97	59	26	1	—	1	—	2,956	3,572	2	—
Shebin-el-Kom ...	2	3	40	12	—	—	—	—	2,660	3,357	—	—
Menouf	—	—	—	—	—	—	—	—	2,148	2,178	—	—
Tanta	121	153	108	117	1	—	2	—	6,532	5,838	—	—
Mehalla-el-Kobra ...	24	30	30	61	—	—	—	—	1,568	1,083	—	—
Zagazig	6	16	2	3	3	—	27	—	317	262	—	—
Mansoura	18	21	42	8	58	5	—	—	4,180	4,753	—	—
Mit-Ghamr	—	—	2	—	—	—	—	—	1,815	3,101	—	—
Damanhour	86	112	14	4	1	—	—	—	5,916	7,214	—	—
Kafr el Dawar ...	3	6	42	106	—	—	—	—	1,553	1,304	—	—
Giza	2	—	3	24	—	—	—	—	1,308	1,579	—	—
Fayoum	2	7	6	41	—	—	—	—	47	65	—	—
Sennuris	3	3	6	13	—	—	1	—	343	578	1	26
Beni-Suef	5	8	120	235	1	—	—	—	4,905	6,368	8	—
Minia	10	16	63	37	4	—	—	—	380	483	7	—
Assiut	48	91	11	3	—	—	—	—	390	395	—	—
Deirout	—	—	—	—	—	—	—	—	695	641	—	—
Girga	31	10	7	12	—	—	—	—	3,099	2,461	—	—
Tahta	128	147	19	144	2	—	—	—	1,961	3,032	—	—
Suhag	—	4	9	—	—	—	—	—	771	968	—	—
Qena	5	5	—	—	—	—	—	—	1,199	2,800	—	—
Nag-Hammad ...	—	—	19	11	—	—	—	—	377	678	—	—
Luxor	—	—	13	27	—	—	—	—	433	698	—	—
Aswan	3	2	15	15	—	—	—	—	14	85	—	—
TOTAL	1,190	1,375	2,540	4,234	135	12	31	—	67,835	85,712	20	111

TABLE No. 45.—PATIENTS CEASED TO ATTEND BEFORE COMPLETION OF TREATMENT
DURING 1946

Locality of Clinic	Syphilis		Gonorrhoea		Chaneroid		Vegetenic Ulcer		Skin Dis.		Other V.D.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zeinab ...	3,276	3,608	1,097	2,266	—	—	—	—	915	234	—	2
Shubra	160	53	69	138	—	—	—	—	2,744	3,757	—	—
Gamalia	210	85	301	1,012	25	—	—	—	512	409	—	—
Akbassia... ..	78	36	160	626	—	—	—	—	176	701	—	—
Old Cairo	12	6	33	259	—	—	—	—	29	75	—	—
Khalifa	13	6	18	154	—	—	—	—	176	516	—	—
Port Said	136	125	144	637	2	—	—	—	1,201	1,675	10	2
Farouk 1st. Polycli- nic	11	32	9	71	—	—	—	—	136	412	—	—
Suez... ..	—	—	51	398	—	—	—	—	1,757	2,469	18	—
Damietta	113	165	27	80	—	—	—	—	105	2,891	—	—
Benha	38	62	—	—	—	—	—	—	—	—	—	—
Shebin el Kom ...	165	109	40	18	—	—	2	—	1,777	2,187	—	—
Menouf	45	37	20	86	—	—	—	—	2,347	1,654	—	—
Tanta	144	127	136	424	—	—	—	—	2,645	1,618	—	—
Mehalla el Kobra	198	142	55	146	—	—	—	—	3,128	2,064	—	—
Zagazig	162	171	114	18	9	—	—	—	5,492	5,193	—	—
Mansoura	205	179	80	15	37	—	—	—	1,393	1,697	—	—
Mit Ghamr	20	35	11	12	—	—	—	—	1,561	3,021	—	—
Damanhour	136	107	29	72	—	—	—	—	1,090	1,307	—	8
Kafr el Dawar ...	35	13	7	37	—	—	—	—	265	147	2	—
Gîza	83	77	40	84	—	—	—	—	139	154	—	—
Fayum	303	263	208	191	—	—	—	—	2,475	3,647	—	—
Sennuris	9	7	5	9	—	—	—	—	75	102	—	14
Beni Suef	93	95	15	47	—	—	2	—	196	110	—	—
Minia	158	90	76	43	1	—	—	—	1,803	2,746	3	—
Assiut	197	192	59	17	—	—	—	—	3,780	3,341	—	—
Deirout	87	110	11	1	—	—	—	—	1,303	1,195	4	5
Girga	200	215	79	31	—	—	—	—	1,101	456	—	—
Tahta	85	58	3	6	—	—	—	—	36	47	—	—
Suhag	180	188	46	3	—	—	—	—	2,451	1,930	3	1
Qena	41	43	10	8	—	—	—	—	134	298	7	—
Nag Hammadi ...	34	73	14	32	—	—	—	—	263	102	—	—
Luxor	168	186	57	161	—	—	—	—	1,243	1,802	—	—
Aswan	101	75	35	21	—	—	—	—	781	1,515	—	—
TOTAL	6,896	6,778	3,059	7,123	74	—	4	—	43,229	49,472	47	50

TABLE No. 46.—CURED CASES DURING 1946

Locality of Clinic	Syphilis		Gonorrhoea		Chancroid		Vegetative Ulcer		Skin Diseases		Other V. D.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Sayed Zeinab ...	3	5	229	171	—	—	—	—	42	37	274	213
Shubra	36	23	675	629	—	—	—	—	11,423	13,255	—	—
Gamalia	108	59	741	1,326	42	7	—	—	1,124	1,240	—	—
Abbassia	—	—	134	291	5	—	—	—	3,332	4,997	—	—
Old Cairo	—	—	7	116	—	—	—	—	130	576	—	59
Khalifa	—	—	2	13	—	—	—	—	323	1,071	—	—
Port Said	1	4	58	63	—	—	—	—	1,321	1,812	—	—
Farouk 1st Polyclinic	—	—	7	18	—	—	—	—	—	1	—	—
Suez	7	12	129	625	17	—	—	—	1,448	1,686	2	85
Damietta	—	—	36	3	—	—	—	—	4,006	7,375	—	—
Benha	—	—	—	—	1	—	—	—	2,489	3,004	—	—
Shebin el Kom ...	—	—	—	—	—	—	—	—	2,660	3,357	—	—
Menouf	—	—	—	—	—	—	—	—	2,148	2,178	—	—
Tanta	—	—	108	117	1	—	1	—	6,532	5,838	—	—
Mehalla el Kobra...	24	30	30	61	—	—	—	—	1,568	1,083	—	—
Zagazig	6	16	2	3	3	—	27	—	317	262	—	—
Mansoura	18	21	42	8	58	5	—	—	4,180	4,753	—	—
Mit Ghamr	—	—	2	—	—	—	—	—	1,875	3,101	—	—
Damanhour	—	—	14	4	2	—	—	—	5,916	7,214	—	—
Kafr el Dawar ...	—	—	42	106	—	—	—	—	1,553	1,304	—	—
Giza	2	—	3	24	—	—	—	—	1,308	1,579	—	—
Fayoum	2	7	6	41	—	—	—	—	47	65	—	—
Sennouris	3	3	6	13	—	—	1	—	343	578	1	26
Beni Suef	5	8	120	235	1	—	—	—	5,832	6,720	8	—
Minia	10	16	63	37	4	—	—	—	380	483	7	—
Assiut	2	2	1	3	—	—	1	—	395	390	—	—
Deirut	—	—	—	—	—	—	—	—	695	641	—	—
Girga	1	10	7	12	—	—	—	—	378	752	—	—
Tahta	—	2	1	26	—	—	—	—	614	1,140	—	—
Subag	—	4	9	—	—	—	—	—	771	968	—	—
Qena	5	5	—	—	—	—	—	—	1,199	2,800	—	—
Nag Hammadi ...	—	—	—	—	—	—	—	—	377	678	—	—
Luxor	1	—	13	27	—	—	—	—	433	753	447	783
Aswan	3	2	15	15	—	—	—	—	14	85	—	—
TOTAL	237	229	2,502	3,987	134	12	30	—	65,173	81,179	739	1,166

TABLE No. 47—NEW CASES AND VISITS TO SCABIES
TREATMENT BATHS. DURING 1946

New Cases		Number of Visits	
M.	F.	M.	F.
8,799	5,792	5,644	3,664

TABLE NO. 48.— HOSPITALS AND CLINICS FROM WHICH PATIENTS ARE REFERRED TO SCABIES TREATMENT BATH DURING 1946

Shoubra Clinic		Sayeda Zeinab Clinic		Gamalia Clinic		Abbassia Clinic		Giza Clinic		Old Cairo Clinic		Khalifa Clinic		Boulac Polyclinic		Demerdash Hospital		King's Hospital		School Hygiene Department		Other Units	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
2,196	2,024	893	854	592	258	342	303	156	78	95	74	6	6	414	241	539	149	94	44	2,119	1,341	1,353	420

TABLE NO. 49— NEW CASES OF SCABIES IN THE SKIN AND V.D. CLINICS DURING 1946

Locality of Clinic	Scabies		Locality of Clinic	Scabies		Locality	Scabies	
	M.	F.		M.	F.		M.	F.
Sayed a Zeinab	Brought Forward	12,760	18,111	Brought Forward	38,396	41,410
Shoubra	Shebin El-Kh m	...	...	Beni Suef	...	...
Gamalia	Menouf	...	...	Minia	...	...
Abbassia	Tanta	...	...	Assiut	...	...
Old Cairo	Mehalla El-Kobra	...	...	Deirout	...	...
Khalifa	Zagazig	...	...	Girga	...	...
Port Said	Mansoura	...	...	Tahta	...	...
Farouk 1st Polyclinic	Mit Gharni	...	...	Suhag	...	...
Suez	Damanhour	...	...	Qena	...	...
Damietta	Kafr El-Dawar	...	...	Nag Hammadi	...	...
Benha	Giza	...	...	Luxor	...	...
	Fayoum	...	...	Aswan	...	...
	Sennouris	...	...	
Total	12,760	18,111	Total	38,396	41,410	Total	51,253	52,217

Chapter IX-LEPROSY CONTROL

General Statistics.

The number of patients who presented themselves to leprosy units this year was 1,434 patients. Of these, 721 were found leprous and the remaining 713 were found suffering from other diseases and were referred to the special hospitals.

The following is a statement of the patients who presented themselves to each unit and the number of those who were found leprous:—

TABLE No. 50

Name of Unit	No. of Patients	Positives	Negatives
Abu Zaabal Colony	60	60	—
Cairo Hospital	267	181	86
Zagazig Clinic	62	47	15
Souhag „	105	64	41
Alexandria „	87	43	44
Mansoura „	110	63	47
Tanta „	313	110	203
Shebin el Kom,,	336	77	259
Minia „	56	46	10
Qena „	38	30	8
TOTAL	1,434	721	713

The number of those who were examined by the leprosy units from the beginning of leprosy control till the end of this year was 26,121. Of these 12,881 were found leprous. 3,164 of these were recorded in more than one unit, leaving 9,717 lepers proper on record. These are distributed as follows:—

TABLE No. 51

Unit	No. of Patients Registered	No. of Repeated ly Registered	No. of Lepers Proper
Abu Zaabal Colony	1,235	1,036	199
Cairo Hospital	3,547	534	3,013
Zagazig Clinic	991	185	806
Souhag „	1,609	131	1,478
Tanta „	1,829	323	1,506
Minia „	1,090	107	983
Alexandria „	486	134	352
Mansoura „	878	343	535
Shebin el Kom „	791	304	487
Qena „	425	67	358
TOTAL	12,881	3,164	9,717

The following is a statement showing number of new patients discovered in the clinics and branches :—

TABLE No. 52

Name of Unit		Branches	No. of New Patients
Abu Zaabal Colony	...	—	162
			162
Cairo Hospital	...	In-Patients	15
		Karamidan	131
		Imbaba	21
		Kaliub	14
			181
Zagazig Clinic	...	Main Clinic	12
		Abu Hammad	3
		Shebin el Kanater	18
		Mina el Kamh	7
		Abu Kebir	7
			47
Souhag	„	Main Clinic	30
		Tima	15
		Girga	5
		Tahta	14
		Akhmim	—
			64
Tanta	„	Main Clinic	51
		Mehalla el Kobra	28
		Zifta	16
		Kellin	5
		Kafr el Zayat	10
			110
Minia	„	Main Clinic	33
		Beni Mazar	1
		Abu Kirkas	6
		Samallut	4
		Mallawi	2
			46
Alexandria	„	Main Clinic	17
		Rosetta	2
		Idko	2
		Damanhour	13
		Disouk	8
		Karmouz	1
			43
Mansoura	„	Main Clinic	40
		Damietta	14
		Sembellawein	3
		Sherbin	1
		Dekernes	5
			63
Shebin el Kom	„	Main Clinic	18
		Menouf	11
		Ashmoun	5
		Quesna and Benha	27
		Tala	16
			77
Qena	„	Main Clinic	8
		Luxor	5
		Dishna	2
		Naga Hamadi	6
		Kous	9
			30

Patients attending the out-patient clinics often require special technical care or immediate isolation to undergo an urgent operation. For these cases, in-patient sections were provided in some of the clinics to accommodate about 25 patients each.

The following is a statement of the patients in isolation at Abu Zaabal Colony, Cairo Hospital and in-patient sections annexed to other units, as at the end of the year 1946:—

Abu Zaabal Colony	385
Cairo Hospital	210
Suhag Clinic	20
Tanta Clinic	31
Minia Clinic	42
Qena Clinic	11
	<hr/>
	699
	<hr/>

The ratio of patients' attendance at leprosy units this year was about 23 per cent as shown in the following list :

Month	Attendance	Percentage	Month	Attendance	Percentage
January	2,319	23	July	2,269	23
February	2,139	25	August	1,969	20
March	2,206	24	September	2,233	23
April	2,252	30	October	2,232	23
May	2,274	25	November	1,713	18
June	2,258	23	December	2,339	24

Treatment.

The number of hydnocarpus oil injections given to patients this year was 107,970.

The amount of hydnocarpus oil used in these injections was about 426 kilos.

The number of dressings done for the patients in all the units during the year was about 141,827.

The following is a table showing the details of these numbers :—

Month	No. of Injections	No. of Dressings	Amount of Oil
			Kgs,
January	11,203	12,676	28·787
February... ..	8,164	9,808	23·378
March	8,344	10,423	23·978
April	10,602	13,079	39·306
May... ..	8,486	10,933	32·966
June... ..	8,156	10,704	32·339
July... ..	10,380	14,098	48·499
August	7,134	10,541	34·660
September	8,122	11,187	39·556
October	10,248	13,970	40·072
November	6,396	10,168	30·801
December	10,735	14,240	52·072
TOTAL .	107,970	141,827	426·414

ABU ZAABAL LEPROSY COLONY

Statistics of Patients.

162 patients were admitted to the colony this year. 60 of these were admitted for the first time and 102 were re-admitted. The number of patients isolated there at the end of this year was 385 patients.

Technical Work.

Every patient is examined on admission in order to treat him for any other disease from which he may be suffering. This is done to raise the patient's physical resistance which is an important factor in leprosy treatment.

The following is a summary of the technical work done within the colony this year :—

(1) Examination of 60 new lepers : 27 of these were found to be of the neural type, 1 of the skin type and 32 of the mixed type. Examination of 102 re-isolated patients: most of them were found in a worse condition than when they were in the colony before. This is due to living conditions outside the colony, namely poor nutrition that weakens their resistance to disease.

(2) There were 45 perforating ulcers this year. These were treated by disinfection, trimming of edges and either making hot baths, injecting their edges with hydnocarpus oil or placing adhesive plaster around them for a week and giving the patient complete rest. 33 of these cases improved before the end of the year. The remaining 12 cases were still under treatment at the end of the year and they were doing better.

(3) The number of leprosy reactions this year was 441. They were all severe cases and were treated with calcium, tartar emetic injections, salycilate mixture and mistura alba.

(4) As is known, Wassermann's examination done to lepers gives positive results in most cases although lepers may not be infected with syphilis. The colony therefore took blood specimens from patients suffering from acute leprosy reaction, during and after the reaction period to find if the reaction had any effect on the Wassermann's result. Following is the result of this experiment :—

No. of Patients	Result Before Reaction	Result during Reaction	Result after Reaction
10	+	+	+
5	—	+	—
9	—	—	Still in reaction period,
30	—	—	

(5) 1,016 skin diseases cases were detected among lepers resident in the colony. They were all treated. 931 of them were cured. The remaining 85 were still under treatment at the end of the year.

(6) The colony examines carefully all patients returned positive for Wassermann's test in order to find out if there is any trace of syphilis. The history of the patient and his family is also studied with a view to treating the syphilitic cases.

The number of patients given syphilis treatment this year was 132.

Treatment of 30 patients was stopped after giving negative results. 57 patients gave positive results after three courses of treatment. Treatment was therefore stopped as the positive result was attributed to their leprosy infection. 27 patients were still under treatment from syphilis at the end of the year.

(7) The number of patients treated this year from alimentary tract diseases such as dysentery, gastritis, enteritis, constipation, hyper-acidity, dyspepsia, etc., was 1,836. 1,683 of these were cured and the remaining 153 were still under treatment at the end of the year.

(8) 79 patients were treated this year from urinary system diseases. 65 of them were cured. The remaining 14 were still under treatment at the end of the year.

(9) The number of patients treated this year from circulatory system diseases was 118. All were cured.

(10) The number of patients treated from ear, nose and throat diseases this year was 660. All were cured.

(11) The number of patients treated from rheumatic pains in muscles, nerves and joints this year was 160. All were cured.

(12) The number of patients treated from parasitic diseases was as follows :—

Bilharzia	34.
Ascaris	15.
Ancylostoma	5.

All these cases were cured.

(13) The number of dressings done this year to patients in the colony was 86,534 or an average of about 7,211 dressings monthly.

(14) The following operations were done this year to some of the colony's patients :—

5	amputation of arms and legs.
83	removal of sequestra.
7	circumcision.
1	lipoma.
9	removal of ear lobules.
134	Incisions.
55	Widening of incisions.

(15) The oculist paid the colony this year 30 visits. He did the following operations in addition to common treatment :—

5	Inoculations.
10	Trichiasis operations.
17	Trachoma expressions.
6	Dilatation of lacrymal passages.
2	Picking of P.T.C. and P.T.D.s.
3	Skin and muscle operations.
2	Pterygium operations.
1	Grapt operation.
4	Excision of lepromatous masses.
2	Entropion operations.

(16) The dentist paid the colony this year 34 visits. The number of patients who attended the dental clinic was 144. Among them 46 were treated from pyorrhoea, 13 from tooth ache and 1 from poison. 46 extractions were made.

(17) All the 60 new patients of this year were bacteriologically investigated. The results of specimens taken from nose and skin of patients were as follows :—

Positive Nose and Skin	Positive Nose	Positive Skin	Negative	Total
28	6	4	22	60

All urine and stools of these patients were investigated and the results were as follows :—

Bilharzia	Ascaris	Albumin	Negative
18	5	2	35

Urine, stools and sputum specimens of 298 of the patients were investigated and the results were as follows :—

Bilharzia	Ancylostoma	Ascaris	Albumin	T.B.	Negative
16	5	10	63	4	200

(18) All the colony's patients were investigated this year clinically and bacteriologically. The results were as follows :—

Bacteriologically :

- 28 patients were positive and became negative.
- 9 patients were negative and became positive.
- 348 stationary.

Clinically :—

- 217 improved.
- 125 stationary.
- 43 became worse.

Treatment of Staff of the Colony.

2,273 cases among members of the staff or their families were medically examined this year within the colony by medical officers of the colony and 109 cases within their residence. The necessary medicaments were supplied from the colony's dispensary.

School for Patients.

The school provides day classes for young children and night classes for grown ups. 32 children attend the former and 15 grown ups attend the latter. At the end of the school term, an examination was held for 29 pupils. 16 of these passed with success and were promoted to higher classes.

Library.

A monthly average of 240 patients attended the library which contains instructive as well as religious books, magazines and newspapers.

An average of 81 books were borrowed monthly by patients to read outside. A patient with a fair standard of education acts as librarian and is assisted by another patient.

Lectures and Sermons.

Patients who are ex-students of Al Azhar University undertake the education and preaching of residents of the colony. They were successful in reviving hope and faith in the patients.

Sports.

A troop of boy-scouts consisting of 30 patients undertake physical exercises of various kinds.

Welfare of Patients.

Much interest is taken in the welfare of patients since they are in segregation for lengthy periods and are apt to feel bored and discontented.

The colony's canteen now contains every necessity. A club is annexed to the canteen where patients can indulge in games and spend their leisure time in amusement.

Loudspeakers are now installed in all corners of the colony so that patients may listen in to broadcasts.

Theatrical Performances.

A theatrical group was formed from among the patients. They gave performances for the entertainment of the patients. Two religious events, the Prophet's Birthday and the first of the Hegira year, were celebrated this year during which religious rites were observed by the patients.

Gaol.

A gaol is annexed to the colony for the detention of leprous criminals who are serving their sentences. It is under the administrative supervision of the Prisons Department and four gaolers are sent from Abu Zaabal Prison for duty at the colony's gaol. Eight convicts were remaining at the end of 1945. Thirteen convicts were admitted during the year under review and 10 discharged on serving their term of imprisonment leaving 11 convicts in gaol at the end of the year.

With the exception of four patients convicted for creating disturbances or escaping from the colony, all convicts committed their crimes outside the colony.

Industrial Activities.

Patients now manage all workshops in the colony and perform all agricultural and industrial work required in the colony. Here below is a statement of their activities :—

- (1) Ten patients form the land levelling gang.
- (2) Fifty patients are engaged in agriculture.
- (3) Eight patients work as attendants.
- (4) 42 patients act as ward orderlies.
- (5) 11 patients work as gardeners.
- (6) Eight patients work as stablemen.
- (7) Seven patients receive the diets from the kitchen and distribute to patients.
- (8) Seven patients work as barbers for the inmates.
- (9) Eleven patients work as carpenters.
- (10) Six patients work as tailors.
- (11) Thirteen patients work as shoe-makers and cobblers.
- (12) 37 patients are engaged in casting concrete slabs required for roads and sanitary installations.
- (13) Eleven patients act as sweepers for road scavenging.
- (14) Four patients work as upholsterers.
- (15) Eight patients act as teachers and librarians.
- (16) Eight patients act as guards.

Agriculture.

Some 17 feddans (acres), 9 kirats and 3 sahms were prepared this year for cultivation in addition to the land already cultivated.

A total of 20,331. 5 kilogrammes of milk were supplied by the dairyfarm of the colony

Cairo Leprosy Hospital.

Since this hospital is temporarily used for the isolation of female lepers until accommodation is provided for them within Abu Zaabal Colony, the same methods of treatment and living conditions as adopted in the colony are used in the hospital. Patients thus undertake household duties, *e.g.* cleaning and tidying beds, washing, etc. Some are engaged in embroidery, others in dressmaking.

A total of 210 female lepers were in isolation at the hospital at the end of 1946.

There are three branch clinics working in connection with the hospital, namely:—

(1) Embaba branch is open for treatment on Saturdays. 2,781 patients were treated therein during this year.

(2) Karamidan branch. In view of the great number of attendance, treatment is provided on Sundays and Wednesdays. Some 8,546 patients were treated this year.

(3) Kaliub branch is open for treatment on Tuesdays. 3,479 patients were treated during the year.

Leprosy Control Law.

Law No. 131 of 1946 relating to leprosy control was issued during the latter part of the year. It provides for the compulsory isolation of lepers, for their recording segregation in settlements and organization of their sojourn in these settlements.

It is hoped that under this law, leprosy will one day be exterminated.

The following table No. 53 gives the number of new patients who attended all Leprosy Units and the percentage of attendance from the beginning of leprosy control until the end of the year 1946.

TABLE No. 53

Year	No of new Patients	No. of Positives	Percentage
1929	394	208	53
1930	1,015	433	42
1931	1,472	588	40
1932	1,287	486	38
1933	1,639	744	45
1934	1,273	618	49
1935	1,083	584	54
1936	1,031	726	70
1937	1,759	888	50
1938	2,171	1,097	50
1939	2,198	1,059	48
1940	2,298	995	43
1941	1,387	728	53
1942	1,586	825	52
1943	1,488	771	52
1944	1,372	672	49
1945	1,234	738	59
1946	1,434	721	50
	26,121	12,881	897

Chapter X.—Mental Diseases

The phenomenon of overcrowding in both hospitals is still prevailing and is increasing with time. A solution for such a state of affairs is urgently needed by the construction of at least two new hospitals one in or near Alexandria and the other somewhere in Upper Egypt. This Department is sparing no effort in finding some solution but so far its efforts have been in vain for one reason or another.

Admissions and Discharges.

The number of patients remaining on January 1, 1946, was 4,395, the admissions numbered 2,905, those discharged or died numbered 2,518, thus leaving 4,782 patients on December 31, 1946, as against 4,395 on December 31, 1945. The number of beds is still the same. i.e. 3,334 or an average of 1,448 patients accommodated over and above the bedding. Compared with the maximum and minimum daily residents, this would be 1,609 and 983 patients respectively more than the hospital accommodation.

Accused Persons Suspected of Insanity.

During the year under review, 198 persons were sent by the Prosecutor General for examination and report. Of these 50 were accused of crimes of violence, 56 of theft. The Parquet also asked for reports on 52 persons who were admitted as ordinary patients. Thus the number of reports sent to the Parquet totalled 250.

Staff.

The number of medical officers, nursing staff, administrative and clerical personnel is far too short to meet the responsibilities arising from the increasing tide of admissions and resulting in an increase in the number of daily residents in the two hospitals.

The whole staff rightly feel that they are overworked and that their leisure hours are far less than those of their colleagues in other departments. An amelioration of their condition is indicated by means of increasing their number and the creation of new hospitals as mentioned above. This, if realised, will not only benefit the staff materially, but will also improve their morale and efficiency which will in the long run be to the benefit of the patients.

Ages of Persons Admitted.

Ages of patients ranged between 10 and 95 years.

Religions and Nationalities of Patients.

Moslems, Christians and Jews were admitted to both hospitals. Besides Egyptians, admissions included Europeans, Near Easterns, Indians and a South American.

Occupation of Male Patients.

The majority were farmers. There were also sailors, artisans, students, and servants of religion, unemployed, clerks and government employees.

Origin of Patients.

Patients from all provinces and governorates and from the Sudan were admitted to both hospitals.

Physical Condition on Admittance.

The ratio per hundred in both hospitals was as follows:-

	Khanka	Abbassia
Fair	50.08	68.39%
Poor	40.03	27.66%
Very poor or moribund	9.89	3.95%

Wassermann Tests.

2,319 specimens of blood and 37 specimens of cerebro-spinal fluid were sent to the Laboratories of the Ministry of Public Health, for examination and gave various results.

Scabies.

231 cases of scabies were treated locally in Abbassia Hospital.

Accused Patients and Prisoners in Residence.

Besides 25 prisoners, there were 430 patients accused in major crimes and 490 in petty offences, making a total of 945.

Deaths.

282 patients died in the two hospitals during the year or a ratio of 3.8 per cent of the patients under treatment, as against 4.7 per cent in 1945, again a most gratifying result.

Ophthalmic and Dental Clinics.

The work in both clinics continued for the benefit of the patients. Of 1,231 patients examined in the Dental Department, 1,180 were given the adequate treatment. 1,085 cases were treated and 92 operations made in the Ophthalmic Department.

Electric Shock and Cardiazol Treatment.

Treatment by both methods continued on a larger scale. Cases of Schizophrenia, Manic Depressive, Confusional Psychosis and Anxiety Neuroses were treated giving results varying between recovery, marked improvement, slight improvement and no improvement.

Accidents.

53 major and 1,595 minor accidents took place in both hospitals. One suicide occurred in Abbassia. Among the major accidents 4 in Abbassia were unfortunately fatal.

Artificial Feeding.

This was carried out 19,107 times without accident.

Epileptic Fits.

8,635 epileptic fits were recorded during the year.

Physical Illnesses.

9,097 cases were treated locally for physical ailments.

Births.

6 children were born in the female wards at Abbassia Hospital.

Autopsies.

65 post mortem cases were made during the year.

Pharmacy.

29,634 prescriptions and 1,100 photos were prepared in the pharmacy of Abbassia Hospital and an almost similar number in Khanka.

X-Ray Department.

520 photos and 108 screenings were made in Abbassia Hospital.

Central Medical Commission.

71 patients in Abbassia were reported to the C.M.C., other than those of Khanka.

Length of Residence.

The length of residence ranged between one month and 40 years.

Escapes.

4 patients escaped from Khanka and 10 from Abbassia. With the exception of one, all were recaptured and brought back to the hospitals.

Khanka Farm.

A proposal to establish houses on the farm for rearing poultry and rabbits is now under consideration.

The production of vegetables from the farm continued as usual, so also its use as a means of occupational therapy to the patients.

Part IV. - MEDICAL Treatment

Chapter XI. - General Hospitals

Number of Hospitals.

There were 89 General hospitals, of which 28 were situated in Governorates and chief towns of Provinces, 61 in Bander towns and districts, and 6 in the Oases. There were besides, two out-patient clinics.

Hospital Accommodation.

The total number of hospital beds this year was 7,014 of which 5,974 were reserved for patients and 1,040 for the staff.

Treatment.

The number of in-patients amounted to 103,496, and the out-patients to 2,285,035.

Surgical Operations.

The number of surgical operations carried out in the in-patient departments this year was 40,454 and in the out-patient departments was 79,977. This gives a total of 120,431 operations carried out this year as compared with 37,730, 76,447 and 114,177 respectively in the previous year.

X-Ray Examination.

The number of cases examined and treated by X-Ray this year was 29,309 as against 28,565 in 1945.

Deaths.

The number of deaths amongst patients in the in-patient departments was 3,453 from a total of 103,496 patients, *i.e.* 3.3% per cent as compared with 4.72 per cent in last year

TABLE No. 51.—SHOWING NUMBER OF HOSPITALS OPERATED BY THE HOSPITALS SECTION DURING THE PERIOD FROM 1937-1946.

Year	Hospitals in Capitals of Provinces and Governorates	Hospitals in Chief Towns of districts	Village Hospitals	Hospitals in the Oases	Out-Patient Clinics
1937	20	45	60	—	3
1938	20	48	62	—	3
1939	20	48	62	—	3
1940	20	51	62	—	3
1941	20	52	—	—	3
1942	20	52	—	—	4
1943	26	52	—	—	3
1944	27	53	—	—	2
1945	27	53	—	6	2
1946	28	61	—	6	2

TABLE No. 55.— GIVES THE NUMBER OF BEDS IN GENERAL HOSPITALS

Year	No. of Beds	Remarks
1937	6,341	
1938	6,822	
1939	6,979	
1940	6,926	The Lock Hospitals were separated from the Section.
1941	6,969	The Village Hospitals were separated from the Section.
1942	6,880	
1943	6,368	Alexandria Hospital was separated from the Ministry.
1944	6,553	
1945	6,663	
1946	7,014	

TABLE No 56.— SHOWS THE DISTRIBUTION OF HOSPITAL BEDS

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth.	Total beds for patients	Beds for Staff	Total No. of Beds
King's	—	—	—	237	9	—	246	90	336
Demerdash	20	—	—	353	12	50	435	151	586
Boulac Polyclinic	—	—	—	32	—	6	38	30	68
Incurable Diseases, Helwan	—	—	—	90	—	—	90	15	105
Port-Said	2	2	12	165	1	—	194	21	215
Suez	4	11	—	193	—	25	233	18	251
Damietta	—	2	—	88	—	37	127	13	140
Damanhour	2	—	—	107	2	—	111	11	122
Tanta	—	4	—	218	2	—	228	69	293
Mansoura	—	—	—	192	10	—	202	11	213
Mit Ghamr... ..	—	—	—	47	—	12	59	8	67
Zagazig	1	3	—	220	—	—	224	16	240
Shebin-el-Kom	—	2	—	88	—	—	90	6	96
Benha	—	—	—	86	—	—	86	9	95
Kaliub... ..	—	—	—	89	—	—	89	4	93
Fayoum	—	1	—	100	—	—	101	6	107
Beni-Suef	—	—	—	92	4	—	96	6	102
Minia	—	2	—	108	12	—	182	34	156
Fikria	—	—	—	30	13	—	43	4	47
Maghagha	—	—	—	—	—	—	—	1	1
Assiut	—	4	—	189	11	—	204	18	222
Mallawi	—	—	—	28	—	11	39	4	43
Subag	—	2	—	106	—	—	108	9	117
Tahta	—	—	—	32	—	—	32	5	37
Qena	—	2	—	88	—	—	90	12	105
Luxor	5	7	—	76	—	—	88	9	97
Esna	—	—	—	68	—	23	91	14	102
Aswan	1	2	—	48	—	25	76	3	79
Ismailia	—	2	—	84	—	12	98	17	115
Delingat	—	—	—	30	—	12	42	69	48
Kafr-el-Dawar	—	—	—	37	—	8	45	10	55
Rosetta	—	—	—	29	—	12	41	8	49
Shoubrakhit	—	—	—	23	—	12	35	8	43
Edfina	—	—	—	45	—	—	45	5	50
Kom Hamada	—	—	—	29	—	11	40	9	49
El Mahmoudia	—	—	—	21	—	—	21	3	24
Dessouk	—	—	—	35	—	12	47	9	56
Mehalla-el-Kobra	—	—	—	114	—	—	114	13	127
Samannud	—	—	—	38	—	8	64	7	53
Tayeba	—	—	—	41	—	15	56	16	62
Sherbin	—	—	—	39	—	12	51	17	58
Zifta	—	—	—	45	—	—	45	11	56
Kafr-el-Sheikh	—	—	—	59	—	—	56	7	66
Fowa	—	—	—	36	—	—	36	6	42
Kafr-el-Zayat	—	—	—	32	—	8	40	6	46
Abshit... ..	—	—	—	—	—	—	—	—	—
Faraskour	—	—	—	31	—	8	39	7	46
Simbellawein	—	—	—	28	—	12	40	9	49
Manzala	—	—	—	35	—	—	35	6	44
Aga	—	—	—	44	—	8	52	11	63
Dikernes	—	—	—	46	—	8	54	11	65
Belbeis	—	—	—	24	—	12	36	9	45
Faqus	—	—	—	31	—	—	31	8	39
Minia-el-Kamh	—	—	—	26	—	8	34	8	42
Zawamel	—	—	—	30	—	—	30	8	38
Tala	—	—	—	29	—	11	40	9	49
Ashmoun	—	—	—	37	—	12	49	9	58
Menouf	—	—	—	60	—	16	76	11	87
Zawyet el Na'oura	—	—	—	26	—	8	44	7	51
Shabin el Kanater	—	—	—	27	—	12	39	8	47

TABLE NO. 56 (contd.)

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth.	Total beds for patients	Staff Beds	Total No. of Beds
El-Arish	—	—	—	19	—	—	19	1	20
Siwa	—	—	—	24	—	—	24	—	24
Saff	—	—	—	30	—	12	42	8	50
Ayat	—	—	—	45	—	16	61	11	72
Itsa	—	—	—	27	—	12	39	6	45
Wasta	—	—	—	25	—	12	37	9	46
Beba	—	—	—	35	—	12	47	10	57
Beni-Mazar	—	—	—	40	—	8	48	13	61
Fashn	—	—	—	29	—	12	41	9	50
Samalout	—	—	—	46	—	—	46	8	54
Deirout	—	—	—	30	—	12	42	10	52
Badari	—	—	—	23	—	8	31	7	38
Sahel Selim	—	—	—	20	—	8	37	11	48
Manfalout	—	—	—	42	—	—	42	4	46
Abutig... ..	—	—	—	35	—	8	43	8	51
Akhmim	—	—	—	28	—	12	40	7	47
Baliana	—	—	—	24	—	12	36	6	42
Girga	—	—	—	35	—	12	47	9	53
Dishna... ..	—	—	—	25	—	8	33	12	45
Kous	—	—	—	32	—	12	44	10	54
Nag-Hamadi	—	—	—	28	—	14	42	10	52
Kom-Ombo... ..	—	—	—	25	—	—	25	6	31
Edfou	—	—	—	27	2	14	43	5	48
Eneiba... ..	—	3	—	4	—	—	7	1	8
El-Dirr	—	—	—	—	—	—	—	—	—
Baharia Oasis	—	—	—	8	—	—	8	—	8
Kharga Oasis	—	—	—	16	—	—	16	—	16
Dakhla Oasis	—	—	—	16	—	—	16	—	16
El Koseir	—	—	—	20	—	—	20	—	20
TOTAL	35	49	12	5,158	77	643	5,974	1,040	7,014

Treatment.

The following table No. 57 shows the number of patients treated in the hospitals :—

TABLE NO. 57

Year	No. of In-Patients	No. of Out-Patients	No. of attend- ance to out- patient sections
1942	95,587	2,375,913	2,258,883
1943	87,326	1,749,732	3,256,737
1944	94,895	2,286,758	3,980,336
1945	96,663	1,850,888	3,495,322
1946	103,496	2,285,035	3,920,413

Operations and X-Ray Examinations.

The following table No. 58—shows the number of operations and X-Ray examinations performed in the hospitals during the last 5 years :—

TABLE No. 58

Year	In-Patients Operations	Out-Patients Operations	Total	X-Ray Examinations
1942... ..	33,007	79,024	112,031	26,746
1943... ..	32,110	71,096	103,206	19,605
1944... ..	32,174	73,622	105,796	21,639
1945... ..	37,730	76,447	114,177	28,565
1946... ..	40,454	79,977	120,431	29,309

Deaths.

The following table No. 59—shows the number of in-patients treated in the hospitals during the last five years and the number of deaths and death-rate for each year :—

TABLE No. 59

Year	No. of In-Patients	No. of Deaths	Percentage
1942... ..	95,587	7,248	7.58
1943... ..	87,326	5,860	6.71
1944... ..	94,895	5,678	5.99
1945... ..	96,663	4,570	4.72
1946... ..	103,496	3,453	3.3

Venereal Diseases.

The following table No. 60.—shows the number of prostitutes treated in the General and District hospitals during the year 1946 :—

TABLE No. 60

	Number
Gonorrhoea	84
Syphilis	25
Other diseases	—
TOTAL	109

The following table No. 61—shows the total number of patients treated for venereal diseases in the General and District hospitals during the year 1946 :—

TABLE No. 61

In-Patient Sections			Out-Patient Sections		
Gonorrhoea	Syphilis	Total	Gonorrhoea	Syphilis	Total
105	185	290	17,266	20,332	37,598

Chapter XII.—OPHTHALMIC HOSPITALS

New Units.

During this year, a permanent hospital in tents was set up at Abu Kebir, thus bringing the total number of ophthalmic units to 100 of which 85 are permanent and 15 travelling.

Projects under Construction.

A permanent ophthalmic hospital is under construction at Ka'ab and it is expected to be completed in the near future.

1947-1948 Budget Proposals.

A permanent ophthalmic hospital in tents is proposed in the 1947-1948 budget.

The extension of ophthalmic treatment centres to all parts of the country is being carried out gradually according to a pre-arranged plan and to funds being made available

Clinical Work.

The following is a summary of the clinical work carried out during 1946 as compared with that of 1945:-

TABLE No. 62.

	1945	1946
New patients	1,197,040	1,246,732
In-patients	35,858	37,344
Operations	250,355	262,305
Out-patients attendances	7,274,554	7,299,385

The number of patients who were found blind in one or both eyes, excluding cataract cases causing blindness, was 46,857 i.e. 3.6 per cent of the total patients examined at the ophthalmic hospitals. By adding the cataract cases causing blindness, the ratio becomes 3.9 per cent.

Acute ophthalmias represent 82 per cent of the causes of blindness. The Gonococcus is still the predominant etiological factor of acute ophthalmias; its ratio to total micro-organisms being 40.7 per cent.

Age of Patients.

Of a total of 1,246,732 new patients treated, 102,222 or 8.2 per cent were under one year of age; 389,843 or 31.3 per cent between one and 15 years; 308,964 or 24.8 per cent between 16 and 30 years of age and 798,806 or 56.1 per cent between one and 30 years.

This shows that the masses appreciate the importance of ophthalmic treatment for infants, children and youths.

Ophthalmic School Clinics.

Ophthalmic clinics are provided at the present time in 36 government primary schools in Cairo and in the provinces.

A School Hygiene Department having been created recently in the Ministry of Education, ophthalmic treatment of pupils is now undertaken by ophthalmic doctors of that Service in almost all schools. Treatment in only nine provincial schools is still carried out by medical officers of this Ministry owing to lack of doctors in the former Ministry.

Of a total of 3,145 pupils examined in these nine schools, 96.8 per cent were found suffering from trachoma in its various stages, 23.5 per cent of these had trachoma in its most active stages, namely trachoma I and II, but as a result of ophthalmic treatment, this latter ratio fell to about 11.6 per cent.

No doubt that the hygienic conditions in the provincial schools are not as good as those in Cairo schools, which fact explains the high percentage of trachoma found in them.

Besides, pupils of 78 other schools were examined and treated by medical officers of the permanent or travelling ophthalmic hospitals in localities where these existed.

Other Services.

Ophthalmologists of this Ministry pay regular visits to examine and treat ophthalmic cases in the following institutions and hospitals :—

Leprosy Colony and Hospital at Abu Zaabal and Syoufia.

Mental Diseases Hospitals at Abbassia and Khanka.

Children Preventorium at Gîza.

Children Preventorium at Zeitoun.

Children Dispensary at Mataria, Cairo.

Fever Hospitals at Abbassia and Embaba.

Convalescent Home and Children Preventorium at Marg.

From time to time, ophthalmologists are also sent to Arish, Tor and the oases for the examination and treatment of the inhabitants.

During pilgrimage, ophthalmologists accompany the medical mission, which is being sent every year to the Hedjaz to examine and treat gratuitously pilgrims of all nationalities at Mecca and Medina.

Accommodation.

The number of beds in all ophthalmic units was 2,279. Steps are taken to increase in-patient accommodation in ophthalmic hospitals wherever space is available.

Post Graduate Course of Ophthalmology.

Fresh graduates are annually given a post graduate Course in Medicine and Eye Surgery with a view to raising the standard of ophthalmology in Egypt.

This course commences in October and ends in April. Two examinations are held the first in April and the second in November.

Ophthalmic Library.

There is a circulating ophthalmic library at Rod-el-Farag Ophthalmic Hospital for the benefit of all medical officers in ophthalmic units. It is provided with old and new ophthalmic literature and placed at the disposal of all doctors with the object of keeping them thoroughly acquainted with recent advance and new progress in the ophthalmic field. Important books and references indispensable to junior medical officers are always provided in several copies to facilitate their circulation.

Modern Apparatus for Ophthalmic Hospitals.

The Ministry continues to provide ophthalmic units with modern apparatus and instruments in order to keep pace with ophthalmic progress.

Chapter XIII—Pharmacies

Private Pharmacies.

The Ministry authorised this year the opening of 19 new pharmacies in Egypt. Approval was given to the transfer of ownership of 22 pharmacies owned by unqualified pharmacists to qualified pharmacists. The total number of pharmacies in Egypt is now 492.

Night Service Pharmacies.

These were three in number, all in Cairo City. A total of 8,743 prescriptions were dispensed during night by these pharmacies exclusive of specialities and patented medicines which are issued without prescriptions.

Poisonous Drug Stores.

Nine permits were granted for dealing in poisonous substances of Schedules I and II: one in Cairo, two in Alexandria, one in Gharbia but has since been withdrawn, three in Giza (one of which has been withdrawn), and one in each of Sharkia and Ismailia.

16 permits were granted for dealing in poisonous substances of Schedule IV: seven in Cairo, 6 in Alexandria, two in Giza (one of which has been withdrawn) and one in Ismailia.

Simple Drug Stores.

19 permits were granted for simple drug stores: one in Damietta, two in Behera, three in Kaliubia, one in Gharbia, seven in Dakahlia, one in Fayoum, one in Minia and three in Qena.

Trading in Medicinal Plants.

Nine permits were granted this year: 6 in Cairo, and one in each of Menoufia, Gharbia and Sharkia.

Medical Practitioners preparing drugs in their clinics for their private patients.

The number of medical practitioners authorised this year to prepare drugs in their clinics for their private patients were as follows:—

4 in Kaliubia Province	4 in Giza Province
4 „ Menoufia „	1 „ Beni Suef „
3 „ Behera „	1 „ Fayoum „
1 „ Sharkia „	1 „ Minia „
1 „ Dakahlia „	2 „ Qena „
6 „ Gharbia „	1 „ Girga „

Registration of Egyptian Specialities.

A total of 102 permits were granted this year for the preparation and sale of Egyptian specialities: 23 specialities were refused registration. This brings the total number of registered Egyptian specialities to 1,472.

Agents.

65 permits were granted this year to agents for trading in drugs: 23 permits for agencies and 17 permits for depots in Cairo; and 12 permits for agencies and 12 for depots in Alexandria. One permit for an agent was granted in Port Said.

Pharmaceutical Laboratories.

Four new pharmaceutical laboratories were authorised this year: one in Benha, two in Cairo and one in Port Said. A laboratory in Cairo was closed down.

TABLE No. 63:—SHOWING QUANTITIES OF STUPEFACIENTS IMPORTED INTO EGYPT
AND EXPORTED THEREFROM DURING 1946

Name of the Drug	Quantity Imported		Quantity Exported	
	Kg.	Gr.	Kg.	Gr.
Opium and its preparations ...	9	990	—	—
Morphine and its salts	4	434	—	—
Cocaine and its salts	2	030	—	—

TABLE No. 64:— SHOWING QUANTITIES OF STUPEFACIENTS CONFISCATED
FOR ILLICIT IMPORT OR EXPORT

Name of the Drug	Kilos
Opium	2,405
Cannabis Indica	2,735
Heroine	1

TABLE No. 65:— SHOWING QUANTITIES OF STUPEFACIENTS CONSUMED
FOR MEDICINAL PURPOSES

Name of the Drug	Kg.	Gr.
Opium and its preparations	21	740
Morphine and its salts	2	949
Cocaine and its salts	3	50

Chapter XIV.—SUMMARY OF THE REPORT OF THE UNIVERSITIES HOSPITALS

FOUAD I HOSPITAL

The number of beds this year was 1,443 as compared with 1,208 in 1945. The increase is due to the transfer in early November of the Ophthalmic Section from Kasr el Aini to this Hospital and the provision of more beds in the Researches Section.

The following table No. 66 gives the distribution of beds among the various sections during the last four years :—

TABLE No. 66

Department	1943	1944	1945	1946
Medical	450	450	450	500
Neurological ...	75	75	75	75
Tropical Diseases ...	75	75	75	75
T.B. (Chest) ...	75	75	75	75
Casualty ...	50	50	50	50
Dermatology ...	75	75	75	75
Sexology ...	75	75	75	75
Radiology ...	43	43	43	43
Erysipelas ...	48	48	48	50
Gynaecology ...	150	150	150	150
Urology ...	75	75	75	75
Research ...	—	25	17	50
Ophthalmic ...	—	—	—	150
TOTAL ...	1,191	1,216	1,208	1,443

In-Patients

A total of 20,550 patients including 2,201 children were treated this year in the in-patient departments of the hospital. 12,322 of this total or 60 per cent were males.

Despite the increased hospital accommodation, it is observed that the number of in-patients was 761 less than in 1945. This is explained by the fact that a few dispensaries and out-patient clinics have been opened in certain quarters of Cairo. These have certainly relieved the Fouad I Hospital of the congestion it had experienced. Moreover, part of the out-patients are dealt with in the forenoon and the other part in the afternoon. This had affected attendance at the out-patients departments and consequently the in-patients.

The decrease was noticeable in the medical, dermatological and urological departments.

The following table No. 67 gives the number of patients treated during 1946 in each of the in-patient departments as compared with their corresponding numbers in the previous two years :—

TABLE No. 67

Department	1944	1945	1946
Medical	7,574	7,317	7,098
Neurological	415	677	579
T.B. (Chest)	401	383	312
Casualty	4,679	5,451	5,061
Dermatology	1,050	1,303	1,146
Sexology	1,055	1,052	1,066
Radiology	415	489	447
Erysipelas	531	663	603
Tropical Diseases	893	833	1,085
Urology	973	1,301	1,080
Gynaecology	1,462	1,842	1,783
Ophthalmic	—	—	285
TOTAL	19,448	21,311	20,550

June and July were the most congested months of the year, while February was the least.

14,020 patients including 1,414 children were discharged as cured or improved. 4,447 patients were transferred to the out-patient departments for further treatment and 841 patients referred to other hospitals. Of 944 deaths recorded during the year, 685 died in the medical diseases sections, 133 in the casualty section, 39 in the urological section, 9 in the dermatological section, 4 in the venereal diseases section, 25 in the radiological section, 34 in the erysipelas section and 13 in the gynaecological section. The rate of deaths was 4.6 per cent of all patients.

The following table No. 68 gives the number and ratio of deaths recorded during the last ten years, *i.e.* since work started in this hospital.

TABLE No. 68

Year	Total discharges	No. of deaths	Deathrate per-cent
1937	11,844	741	6.2
1938	14,408	904	6.2
1939	14,677	905	6.4
1940	15,606	926	5.2
1941	15,905	1,018	6.4
1942	16,802	1,091	5.6
1943	18,276	893	4.9
1944	19,533	1,027	5.3
1945	21,358	1,011	4.7
1946	20,264	944	4.6

According to this table, the highest death-rate was 6·4 per cent and the lowest was the one recorded this year namely 4·6 per cent.

Of 2,529 cases treated from respiratory system diseases, 1,346 suffered from diseases of the lungs, 801 from T.B., 129 from emphysema, 64 from broncho pneumonia and 68 from pneumonia.

Of 664 cases treated from diseases of the bronchi, 286 suffered from bronchitis and 304 from asthma and bronchial asthma.

Of 664 cases treated from diseases of the pleura, 219 suffered from pleurisy with effusion.

There were 2,706 cases treated from diseases of the digestive system. These included 136 patients suffering from dyspepsia, 67 from gastritis, 48 from gastric ulcer and 44 from hematemesis. Of 158 cases treated from diseases of the intestines, 61 suffered from diarrhoea and 24 from appendicitis.

Of 620 cases treated from parasitic diseases, 279 suffered from ancylostoma and 122 from ascaris.

Of 184 patients treated from diseases of the colon, 123 suffered from colitis and 52 from spastic colitis.

Of 668 patients treated from diseases of the liver, 317 suffered from liver cirrhosis and 110 from catarrhal jaundice.

Of 187 patients treated from diseases of the gall bladder, 178 suffered from cholecystitis.

472 patients were treated from diseases of the peritoneum. These included 340 cases of ascitis and 114 cases of T.B. peritonitis.

Among a total of 3,195 patients treated from cardiovascular system diseases, 553 suffered from diseases of the mitral valve, 480 from rheumatic heart diseases, 216 from diseases of the aortic valve, 689 from congestive heart failure, 331 from hypertensive heart failure and 456 from diseases of the vessels including 401 cases of hyperpiesia

A total of 977 patients were treated from diseases of the urogenital system. These included 283 patients suffering from urinary bilharziasis, and 375 from diseases of the kidneys and ureters including 257 cases of nephritis and 23 hydronephrosis.

There were 1,655 cases of diseases of the central nervous system. These included 360 cases suffering from spinal nerves, 661 from affections of the brain including 369 cases of hemiplegia and 98 cases of epilepsy, 272 cases suffering from affections of the spinal cord including 139 cases of myelitis. Of 87 cases treated from psychoneurosis, 38 suffered from hysteria and 49 from anxiety neurosis.

Diseases of the blood, lymphatics and spleen totalled 1,056 including 285 cases of anaemia due to iron deficiency, 167 cases of parasitic anaemia and 310 cases of hepato-splenomegaly.

Among 765 cases of diseases of the metabolism, 258 cases suffered from diabetes mellitus and 282 cases of pellagra.

There were 369 patients suffering from diseases of the joints and 37 patients suffering from diseases of the bones.

200 cases of infectious diseases and 317 cases of other diseases were recorded.

Casualty cases numbered 5,020 as against 5,342 in 1945.

The following table No. 66 shows the number of casualty admissions and deaths during the last ten years as compared with the number of admissions in the other sections of the hospital.

TABLE No. 66

Year	Casualty Patients		Death Rate %	Total Admissions to F.I.H.	Rate of Casualty cases to General Admissions	Total Number of Beds
	Cases	Deaths				
1937	4,539	95	2·1	11,844	38·3	543
1938	5,324	105	2	14,408	37	844
1939	4,692	141	3	14,677	33·3	844
1940	4,119	109	2·3	15,606	28	919
1941	5,202	119	2·8	15,905	32·8	967
1942	5,205	149	2·2	16,802	27	966
1943	4,826	105	2·2	18,276	26·4	1,191
1944	4,519	138	3·1	19,533	23·1	1,216
1945	5,342	117	2·2	21,358	25	1,208
1946	5,020	81	1·6	20,464	24	1,443

The significant feature about this table is the small number of deaths, *i.e.* 81 or 1·6 per cent of the casualty cases.

Of the casualty cases, 699 cases with 54 deaths were from scorpion stings as compared with 803 cases in 1945. This gives a death rate of 7·7 per cent.

The number of cases of food poisoning was 1,821 with eight deaths as compared with 2,088 cases in the previous year.

The following table No. 70 gives the number of cases of food poisoning recorded during the last eight years and their ratio to total casualty cases.

TABLE No. 70

Year	Cases of Food Poisoning	Deaths from Food Poisoning	Total Casualty Cases	Death rate to Total Casualty Cases
1939	1,783	13	4,496	38·0
1940	1,654	10	4,919	33·6
1941	1,738	7	5,202	32·3
1942	1,717	9	5,205	33·0
1943	1,726	10	4,826	35·8
1944	1,676	8	4,519	37·0
1945	2,088	6	5,342	39·0
1946	1,821	8	5,020	36·2

Petrol poisoning accounted for 505 cases with 19 deaths. There were 148 cases suffering from alcoholic intoxication including 15 females. Of 94 cases of poisoning with vegetable alkaloids, datura accounted for 59 cases. 175 other cases of poisoning with iodine, lysol and phenol were admitted.

Of 719 cases admitted with fever, 211 (152 males and 59 females) were transferred to the fever hospital.

Of 304 mental cases admitted under observation, 189 (121 males and 68 females) were transferred to the mental hospital.

Out-Patient Treatment

The total number of out-patients this year was 983,333 as against 1,357,680 or 374,347 less than in 1945. Old out-patients numbered 674,296 as against 1,025,140 or 350,844 less than in the previous year.

The new out-patients were 309,037 as against 332,540 or 23,503 less than in the previous year. This decrease in the number of out-patients began in 1945 and manifested itself in the subsequent years. With the exception of the Chest Diseases Section whose attendance is on the increase, attendance of all the other sections were affected by the decrease.

The following table No. 71 gives the number of out-patients attending the Chest Diseases Department during the last seven years:—

TABLE No. 71

Year	New Out-Patients	Old Out-Patients	Total
1940	3,540	9,281	12,821
1941	3,330	11,221	14,551
1942	3,586	13,304	16,890
1943	5,508	12,807	18,315
1944	3,461	14,540	18,001
1945	3,720	16,322	20,042
1946	3,854	18,288	22,142

The following table No. 72 gives the number of out-patients attending the various sections during 1946 with their corresponding numbers in 1945 :—

TABLE NO. 72

Section	Year	New Patients	Old Patients	Total
Medical {	1945	101,071	262,617	363,690
	1946	107,030	71,317	278,347
Neurological {	1945	7,506	26,417	33,923
	1946	6,728	13,528	20,256
Tropical Diseases {	1945	7,677	26,150	33,827
	1946	8,927	19,368	28,295
T.B. (Chest) {	1945	3,720	16,322	20,042
	1946	3,854	18,288	22,142
Surgical {	1945	6,292	137,411	190,903
	1946	3,518	82,424	139,931
Urological {	1945	2,897	8,551	11,448
	1946	2,989	6,278	9,267
Orthopaedic {	1945	4,414	16,281	20,705
	1946	3,418	12,623	16,041
Gynaecological {	1945	20,047	56,232	76,279
	1946	22,203	47,162	69,455
Obstetric {	1945	2,676	3,700	6,436
	1946	2,637	3,006	5,643
Ophthalmic {	1945	34,921	137,108	172,029
	1946	34,120	108,338	142,458
E.N.and,T {	1945	19,043	92,008	111,051
	1946	20,861	79,898	100,759
Dermatology {	1945	43,625	143,065	186,680
	1946	33,899	84,031	117,930
Sexology... .. {	1945	4,874	57,924	62,798
	1946	4,774	28,035	32,808
Dental {	1945	23,571	47,140	75,711
	1946	23,392	47,500	70,892
Total ...	1945	332,540	1,025,140	1,357,680
	1946	309,037	674,296	983,333

The only explanation for this decrease is that patients now prefer to attend one of the many dispensaries and clinics recently established in their neighbourhood rather than come a long way to this hospital.

KASR EL AINI HOSPITAL

A shuffle of Kasr el Aini Hospital accommodation has taken place this year following the transfer on November 21, 1946, of the Ophthalmic Department to Fouad I Hospital and the distribution of the 132 beds it occupied among the other Sections. Thus 111 beds were added to the Surgical Department bringing its total beds to 862, 15 beds to the Gynaecological Department bringing the total to 96 beds and 6 beds to the Ear, Nose and Throat Department bringing its total beds to 71. This Hospital is still in need of further expansion to meet the ever increasing number of admissions. There were 23,650 admissions in 1946 as against 22,822 in the previous year. Most of the increase went to the Surgical Department. A total of 16,926 surgical cases were admitted during this year as against 16,019 in 1945 or an increase of 907 patients.

Casualty Cases in Kasr el Aini

A total of 5,298 casualty cases were admitted this year to Kasr el Aini Hospital. Of this number 645 died. Motor car accidents were responsible for 949 cases, burns for 782, slipping for 564, falls from heights for 510 and tram for 466 cases. It is observed that motor accidents show a marked decrease when compared with their number in 1943, namely 1,265. This was probably due to light restrictions during war years and the large number of military vehicles then in circulation.

Discharges as cured or at their own request numbered 14,349 of which 8,885 cases were discharged from the surgical sections. 7,547 patients were referred to the out-patient departments for further treatment. Deaths recorded during the year were 1,286 or 5.4 per cent of total discharges numbering 23,505, i.e. 1.2 per cent less than in 1945. It is pointed out that 654 of these deaths were casualty cases who arrived in a dying condition and succumbed on arrival at hospital.

The following is a brief summary of the diagnosis of surgical cases as compared with their number in 1945 :—

Diseases	Cases in 1946	Cases in 1945
Fractures	2,905	2,850
Affections of the intestines	2,415	2,387
,, ,, rectum and anus	1,314	1,115
,, ,, kidneys	1,057	904
,, ,, brain and its meninges	1,038	1,188
Burns and scalds	972	1,112
Pyogenic infections and infected wounds	872	1,105
Diseases of joints	576	607
Diseases of bones	466	389
Affections of the scalp and cranium	899	1,208
Diseases of the thyroid gland	243	210
Affections of the spleen	287	266
,, ,, bladder	537	532
,, ,, prostate	132	106
,, ,, testi	588	514
Surgical affections of the chest wall, lungs, pleura and mediastinum	258	326

FOUAD I CHILDREN HOSPITAL

The number of beds remains the same as in 1945, *i.e.* 161 beds . Of this number 118 beds are reserved for medical diseases, 30 for surgical cases and the remainder for ear, nose, and throat, ophthalmic and dental diseases.

The in-patients numbered this year 2,468 (1,477 male and 991 female children) as against 2,520 (1,473 males and 1,047 females) in 1945

Of this number, 1,230 patients were cured and 665 were transferred to other hospitals or the out-patient department for further treatment. There were 476 deaths (271 males and 205 females) or a ratio of 20 per cent of the total patients.

As compared with 1937 statistics, the number of in-patients shows a steady increase. In 1946 the in-patients numbered 2,468 as against 1,459 in 1937 or almost twice their number. The following table No. 73 gives details of in-patients during the past ten years :-

TABLE No. 73

Year	Males	Females	Total	Year	Males	Females	Total
1937... ..	830	629	1,459	1942... ..	1,366	977	2,341
1938... ..	977	664	1,641	1943... ..	1,493	1,038	2,531
1939... ..	917	749	1,746	1944... ..	1,517	1,031	2,628
1940... ..	1,042	767	1,809	1945... ..	1,473	1,047	2,520
1941... ..	1,313	906	2,219	1946... ..	1,477	991	2,468

2,032 of the in-patients or their greater number suffered from medical diseases. 500 of these or 2.5 per cent died. 422 patients suffered from surgical diseases. 22 or 5 per cent of their number died.

Of 191 in-patients suffering from diseases of nutrition, 108 suffered from marasmas as compared with 182 and 119 respectively in 1945. 295 patients suffered from dyspepsia as against 301 in 1945. Of 171 patients suffering from affections of the stomach, 58 patients were of unknown causes. Among patients suffering from parasitic infections, 11 were ancylostoma, 46 ascaris and 16 bilharzia.

Of 113 cases of diseases of the abdomen, 23 were hepatosplenomegaly, 13 cirrhosis of the liver and 13 splenomegaly.

Among 386 cases of respiratory system diseases, 222 suffered from broncho-pneumonia, 69 from bronchitis, 34 from empyema and 18 from effusion.

76 patients suffered from T.B. including 34 pulmonary, 13 peritonitis and 12 Pott's disease.

Of 92 cardiovascular system cases, 21 suffered from heart failure and 18 from rheumatic heart diseases.

Among 129 anaemic patients, 59 were parasitic and 44 nutritional.
101 patients suffered from nervous system diseases including 18 hemiplegia and 23 paraplegia.

Skin diseases cases numbered 82 while infectious diseases cases numbered 171 including 44 typhoid and paratyphoid and 32 diphtheria.

Ear diseases cases numbered 81 including 39 tonsils and 10 foreign bodies.

Ophthalmic cases numbered 110 including 30 leukoma, 15 corneal ulcer and 13 trichiasis.

Surgical cases numbered 408 including 47 cases of hernia, 43 abscesses, 23 prolapse of rectum, 17 osteomyelitis and 10 appendicitis.

Out-Patients Department

There were 565,461 out-patients this year as against 571,855 in 1945, i.e. 6,394 or 1 per cent less.

New out-patients numbered 309,626 and old out-patients 255,835.

It is observed that while new out-patients show a steady increase, old out-patients are decreasing. These were 311,043 in 1944, 284,726 in 1945 and 255,835 in 1946.

Intestinal diseases still account for the greatest number of infantile victims. There were 95,301 cases including 68,724 cases of dyspepsia and diarrhoea. Among 40,998 cases of nutritional diseases, 19,622 cases suffered from rickets and 12,781 from anaemia.

Among 50,203 cases of respiratory system diseases there were 40,249 cases of bronchitis, 8,403 cases of adenoids and tonsils and 1,113 pneumonia.

There were 2,204 T.B. cases including 446 pulmonary T.B.

Among 27,884 infectious diseases cases there were 6,449 whooping cough, 1,462 unknown fevers, 1,808 measles, 794 influenza and 263 diphtheria cases.

The most congested months of the year were July and August. February had the lowest number of out-patients.

FAROUK I UNIVERSITY HOSPITALS, ALEXANDRIA

The number of beds in the main hospital during this year was 584 as against 526 in 1945 or an increase of 58 beds which were distributed among the different departments.

Until October 1942, the strength of this hospital was one thousand beds. In that year, a faculty of medicine was created in Alexandria and accommodated in this hospital. Part of the hospital accommodation was taken up by the Faculty and its laboratories, etc. Hence the abrupt decrease in the number of beds.

In Patients

The number of in-patients admitted to the main hospital and Shatby annex during the year under review was 16,065 as against 15,428 in 1945 or 637 more patients than in 1945. Of the in-patients, 15,102 (9,767 males and 5,335 females) were adults and the remaining 963 (723 males and 240 females) were children.

These patients were distributed among the different departments as follows: Surgical Department 7,193 or almost half the total number of in-patients; medical diseases 3,913 or 24 per cent; gynaecological and obstetric department 1,764 and orthopaedic department 1,355.

15,385 patients (14,375 adults and 1,010 children) were discharged during the year as cured or improved. Of these discharges 7,031 were surgical cases, 3,437 medical diseases cases, 1,315 orthopaedic cases and 1,797 gynaecological and obstetric cases.

Of 440 deaths recorded during the year, 126 occurred in the surgical department, 273 in the medical diseases department and 15 deaths in the remaining departments. The death rate was 2.7 per cent as against 2.5 per cent in 1945.

A total of 12,839 surgical operations were performed during the year or 4,492 operations more than in 1945.

Diagnosis of Medical Diseases Cases

Of 995 cases of respiratory system diseases, 119 cases suffered from bronchitis, 64 from broncho-pneumonia, 61 from asthma, 25 from haemoptysis and 32 from emphysema.

395 patients (340 males and 55 females) suffered from T.B. 38 patients suffered from abscess of the lung, 76 from pleural effusion and 34 from pleurisy.

842 cases suffered from diseases of the digestive system. These included 138 cases of diseases of the mouth and 192 diseases of the intestines. Of 141 cases of parasitic infections, 90 suffered from dysentery, 33 from bilharzia and 38 from diseases of the colon. Of 179 cases of diseases of the liver, 35 had hepatitis, 83 jaundice and 33 from cirrhosis of the liver. 48 other cases suffered from diseases of the gall bladder and bile ducts and 76 from diseases of the peritoneum.

Among 826 cases of diseases of the cardio vascular system, 161 cases suffered from rheumatic heart, 60 from mitral valve, 180 from congestive heart failure and 82 from hypertensive heart failure.

Of 54 patients suffering from diseases of the coronary arteries, 32 suffered from diseases of the aorta. Of 111 cases of diseases of the vessels, 61 had arteriosclerosis and 45 from hypertension. Diseases of the urogenital system accounted for 175 cases including 16 cases of uraemia and 72 cases of nephritis.

Of 487 cases of diseases of the central system, 151 were hemiplegia, 58 spinal cord, 59 mental deficiency and 23 psychoneurosis.

269 cases suffered from diseases of the blood, lymphatics and spleen. These included 83 cases of anaemia, 106 cases of hepatospleen and 141 cases of splenomegaly.

Among 273 cases of diseases of the metabolism and endocrine glands, 104 suffered from pellagra, 71 from diabetes and 64 from endocrine glands.

112 patients suffered from diseases of the joints and bones: 103 from the former and 9 from the latter.

Infectious diseases accounted for 98 cases including 39 rheumatic fevers.

There were 441 casualty cases all of which were saved except 6 who died.

Diagnosis of Surgical Cases

Diagnosis of surgical cases fell under 61 groups, the following figure foremost :--

504	cases of pyogenic infections and infected wounds.
136	„ ulcers,
362	„ burns and scalds,
412	„ wounds,
1,531	„ fractures
390	„ scalp and cranium,
487	„ diseases of the brain and meninges,
153	„ „ „ chest,
65	„ „ „ breast,
175	„ „ „ abdominal wall and peritonium,
177	„ „ „ intestines,
334	„ „ „ rectum,
312	„ „ „ kidneys,
132	„ „ „ bladder,
47	„ „ „ prostate,
94	„ „ „ testis and epididymis.

Out-Patients

The number of out-patients during 1946 was 745,346 (215,820 new patients and 529,526 old) as compared with 698,078 in the previous year. It is observed that the number of out-patients during the past three years shows a steady increase. The Ophthalmic Department is the most congested. There were 264,031 (29,221 new and 234,810 old) ophthalmic out-patients or one fourth of their total number. Surgical department comes next with 158,144 out-patients (21,525 new and 136,619 old), and then the medical department with 145,495 out-patients (78,967 new and 66,528 old).

Skin and venereal diseases out-patients numbered 88,998 (38,332 new and 50,666 old).

MALIKA NAZLI CHILDREN HOSPITAL

In-Patients

The strength of this hospital is 55 beds all of which are assigned for medical diseases. Out of a total of 790 patients admitted during the year, 632 children were discharged as cured while 158 children died or a death rate of 20 per cent.

April and May were the months with the greatest number of patients. Perhaps the change of the weather at this time of the year has something to do with this increase.

Since this hospital was annexed to the Universities hospitals in 1944, no change was introduced except the evacuation of 22 beds hitherto occupied by old invalids making a total accommodation of 55 beds all reserved for children.

Diagnosis of Admissions

- (1) Diseases of the new-born accounted for 11 children all of whom died.
- (2) Diseases of nutrition accounted for 158 children with 30 deaths.
- (3) Diseases of the alimentary canal numbered 217 with 78 deaths.
- (4) 31 children suffered from abdominal diseases 3 of whom died.
- (5) 217 children suffered from respiratory system diseases 11 of whom died.
- (6) Of 28 tuberculous children 7 died.
- (7) 28 children with 3 deaths suffered from cardio vascular system diseases.
- (8) Diseases of the blood accounted for 13 children with 3 deaths.
- (9) 13 children suffered from uro-genital diseases. None of them died.
- (10) 43 children with 4 deaths suffered from nervous system diseases.
- (11) 4 children with one death suffered from diseases of the endocrine glands.
- (12) Two patients suffered from locomotor system diseases. Both recovered.
- (13) Infectious diseases accounted for eight children all of whom recovered.
- (14) Nine children suffered from other diseases and all recovered.

Foundlings

Number of Foundlings remaining in hospital on January 1, 1946	...	...	60
Number of Foundlings admitted during the year	...	...	123
Number of Foundlings died during the year	...	...	97
Number of Foundlings transferred to orphanages	...	...	14
Number of Foundlings adopted	...	...	2
Number of Foundlings remaining on December 21, 1946	...	...	70

Out-Patients

These totalled 79,128 (36,796 new and 42,332 old) as against 61,830 in the previous year or 17,298 out-patients more than in 1945. It is to be pointed out that only medical diseases are treated in the out-patient department.

The following is the diagnosis of the out-patients:—

10,416 cases of respiratory system diseases including 58 cases of pulmonary tuberculosis.

16,445 cases of digestive system diseases including 9,152 cases of dyspepsia.

6,804 cases of nutritional diseases, 1,747 cases of infectious diseases and 1,167 cases of skin diseases. There were also 90 cases of nervous system diseases, 86 cases of circulatory system diseases and 41 cases of urinary diseases.

Part IV. — ENDEMIC DISEASES

Chapter XV. — ANCYLOSTOMA AND BILHARZIA

I.—New Units :—

(1) Four new units were established this year bringing the total of Ancylostoma and Bilharzia units to 98.

(2) In-patient Accommodation in Units.

A credit of L.E. 301,670 has been allocated for providing all Ancylostoma and Bilharzia units with 20-bed in-patient departments. So far, 517 beds have been provided in 51 units.

II.—Treatment :—

(1) Out-Patient Treatment.

The following table No. 74 is a statement of the number of new patients, the number of injections and anthelmintic doses administered during 1946, as compared with their corresponding numbers in 1945.

TABLE No. 74

	1946	1945
Number of new patients	1,157,883	1,016,957
Number positive for Ancylostoma	199,329	176,309
Number positive for Bilharzia	582,963	507,464
Number positive for Ascaris	453,841	368,336
Number of injections given	3,948,647	3,800,868
Number of Anthelmintic doses administered	464,152	182,334

(2) Treatment of Pupils :—

Of 58,221 pupils examined :

14,308 were returned positive for Bilharzia.

1,216 were returned positive for Ancylostoma.

2,627 were returned positive for Ascaris.

Positive cases received 3,064 anthelmintic doses (3,048 for new and 16 for old patients). 70,417 injections were given to Bilharzia positive cases (7,984 to new and 62,433 to old cases).

(3) Treatment of the Territorial Army :—

Of 4,035 men examined, 3,080 were positive for Bilharzia and 1,364 for Ancylostoma. The former were given 24,363 injections (2,078 to new and 22,285 to old patients). 1,825 anthelmintic doses were given to the latter (1,739 to new and 86 to old patients). The respective medical services were asked to follow up treatment.

(4) In-Patient Treatment :—

Total in-patient accommodation was 707 beds.

Total number of in-patients treated was 2,809.

Total number of in-patients cured 2,354.

The remainder improved. No deaths were recorded.

III.—*Treatment Technique :—*

(1) *Repodral and Tartar Emetic in the Treatment of Bilharzia.*

In view of the introduction of intramuscular injection in the treatment of Bilharzia, it was deemed necessary to determine the cases in which Repodral is considered preferable to Tartar emetic. These cases are shown below :—

- (a) Cases suffering from chronic affections of the lungs.
- (b) Cases of debility, anaemia and compensated heart diseases.
- (c) Cases of pregnancy provided being free from symptoms of kidney affections.
- (d) Cases in which the veins are difficult to locate.
- (e) Light body-weights (children and pupils).

(2) *Provision of meals to patients suffering from severe anaemia and pellagra.*

Since the experiment of providing patients suffering from severe anaemia or pellagra with meals in addition to treatment proved successful, the budget has been so arranged as to provide for the introduction of this method into all the units.

IV.—*Cooperation with Services concerned with Endemic Diseases Treatment.*

(1) *Hospitals Section.*

Certain laboratory assistants and attendants have been detailed to hospitals with the necessary equipment to undertake the examination and detection of patients suffering from endemic diseases. Treatment is undertaken by the medical officers of the hospitals. This method has been tried in Sahel Selim and Zawamel district hospitals.

(2) *Ministry of Education Medical Section.*

Centres have been set up in conjunction with the Ministry of Education for the examination and treatment of pupils suffering from Bilharzia. Of a total of 21,902 pupils examined, 5,011 were found positive. These received 20,792 injections.

In order to examine the largest possible number of pupils, a vehicle has been specially equipped for this purpose. Some 198 schools in Cairo have been visited by this vehicle. The total number of pupils examined was 23,074. Among these, 4,376 were positive for Bilharzia.

In Alexandria, 140 schools were visited, a total of 15,384 pupils were examined and 2,880 were positive for Bilharzia.

(3) *Cooperation with the Commission on Nutrition.*

At the request of the Permanent Commission on Nutrition, the inhabitants of Kom Ombo and those of some of the villages of Shebin el Kanater district were examined with a view to estimating the extent of their infection with parasitic diseases, since these were closely related to researches undertaken by the Commission on Nutrition.

V.—*Propaganda.*

(1) *Lectures :—* Some 23,518 lectures were delivered during the year.

(2) *Raising the Standard of Health Education.*

Members of school health societies, teachers of hygiene and health visitors have been permitted to visit Ancylostoma and Bilharzia Units for instruction and appreciation of the dangers of these diseases so that, when they go back to their villages during holidays, they can undertake propaganda among their country folk. Theoretical and practical studies have also been provided to teachers of hygiene and lectures delivered to health visitors dealing with prevalent diseases and means of protection therefrom.

VI.—*Cooperation of Ancylostoma Units in the Treatment of Relapsing Fever.*

In view of the spread of relapsing fever in certain areas, Ancylostoma units assisted in the treatment of these cases in addition to their routine work which was not suspended.

VII.—*Raising the Scientific and Technical Standards of Staff.*

Laboratory assistants in Ancylostoma and Bilharzia units hve been trained in administering intramuscular injections under supervision of medical officers.

VIII.—*Training of new Laboratory Assistants .*

Laboratory assistants newly appointed to Ancylostoma units or other units of the Ministry are trained in microscopical examination, in examination of malaria samples and in other chemical research duties. The following is a statement of the number of Laboratory Assistants trained by the training centre at Fom el Khalig Ancylostoma Hospital:—

Lab. Assistants from units of the Ministry	98
Lab. Assistants from Rural Health Department	35
Lab. Assistants from Hospitals Section	5
Lab. Assistants from Chest Diseases Section	8
Lab. Assistants from Preventive Medicine Department... ..	1
Lab. Assistants from Ministry of Social Affairs	5
Lab. Assistants from School Hygiene, Ministry of Education	6
TOTAL	158

IX.—*Mass Compulsory Treatment in Fayoum Province.*

(1) *Work of Mobile and Stationary Units .*

Examination and treatment operations undertaken by the ten light mobile units in villages and the four stationary units in the four districts of Fayoum Province were continued during the period from January 1 to May 15, 1946, when treatment operations were suspended following the spread of relapsing fever.

The results of these activities are shown in the following statement :—

TABLE No. 75

Number of persons examined for urinary schistosomiasis	112,438
Number of persons found positive for urinary schistosomiasis... ..	47,643 (or 42%)
Number of persons examined for intestinal schistosomiasis	24,416
Number of persons found positive for S. mansoni	5
Number of persons found positive for S. Hematobium	160
Total number of Bilharzia patients	47,736
Number positive for Ancylostoma	2,913 (or 12 %)
Number positive for Ascaris	1,911 (or 7 %)

TABLE No. 76 SHOWING TREATMENTS GIVEN AND RESULTS THEREOF

Drug used	Number Treated		Number examined after treatment	Number cured
	New	Old		
Carbon Tetrachloride	1,063	13	197	158
Oil of Chenopodium	2,276	21	248	197
Filix mas (male fern)	50	3	—	—
Tarter emetic	20,977	294,683	16,844	13,086
Fouadin	184	2,196		

(2) *Survey of a treated village to determine extent of re-infection and relapse of infection.*

In order to determine the extent of new infection and relapse of infection in villages already treated by the light mobile units, Talat village of Fayoum District, with a population of 3,624 people was taken as a control. Its canals were cleared by the Bilharzia Snail Destruction Section to within a radius of three kilometres from the village.

Negative persons were examined once a month for new infections. Treated Bilharzia cases were examined once every three months for re-infections.

The following is the result of examination of first group :—

	Total Monthly New Positive Cases											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Total negatives and children 1,782	82	No.ex. done	126	140	157	172	185	189	227	255	289	—

Result of examination of second group :—

	Total Cases found positive on examination					
	Jan.	March	April	July	Oct.	Dec.
Total No. of Bilh. patients treated 1,882 ...	372	treatment	131	448	733	969

The special studies conducted on Bilharzia incidence, its age and sex distribution, etc, are still proceeding.

(3) *Repetition of course of treatment.*

Since the ratio of infection was high in villages visited by the light mobile units, it was deemed necessary to provide a second course of treatment to enable absentees in the first treatment to get treated.

(4) A control unit was formed to investigate the work of the other units. This unit has surveyed the work in villages already visited by other units. The results were satisfactory.

Chapter XVI - MALARIA

Control Measures.

Last year, it was decided to limit control measures to within a radius of two kilometres from main malaria stations and one kilometre from branch stations instead of five kilometres since it was established that, without other means, a mosquito cannot travel more than one kilometre. Since then, greater efforts were directed to the control of the breeding places and adult mosquitoes. This was made still easier by distributing the "darakat" (zones) among overseers according to number of breeding places in each. These were shown on special survey maps distributed to all the units. Each zone was further divided into six subsections to allow weekly periodical treatment.

Ten main malaria stations and 18 branch stations were provided this year making a total of 36 main and 74 branch stations as against 26 and 56 respectively in the previous year. The attached charts show the distribution of the main and branch stations in Lower and Upper Egypt as well as the Governorates and Frontier Districts.

It is worthy of mention that some 489,225 acres are now under control of which 308,140 acres are controlled by main malaria stations and 181,085 by branch stations. This provides protection to 2,718,534 of the population. Of this number 1,760,939 people are served by the main stations and 957,595 by branch stations, *i.e.* an average of 8,804 acres and 50,312 people per main station and 2,480 acres and 13,117 people per branch station as shown in attached tables.

These units are supervised by medical officers or engineers assisted by laboratory assistants, supervisors and surveyors with a number of trained overseers and labourers in proportion to the number of zones of each unit.

During 1946/1947, a sum of L.E. 50,000 was allocated for control work. This was expended during the year.

Treatment.

Tables Nos.102 and103 show the amounts of medicines and drugs distributed for treatment purposes after the clinical or microscopical examination of patients. Blood specimens are taken from suspected cases and examined before treatment is prescribed. Moreover, all medical officers of the Ministry are now authorised to prescribe this treatment to all clinically suspected malaria cases.

Compared with last year, the malaria case-rate has markedly fallen this year, being 19 per cent as against 23·3 per cent in the preceding year. This is largely attributable to increased activities of malaria units, use of modern insecticides and treatment of clinically suspected cases.

The following table No. 77 gives the distribution of main branch and travelling malaria units throughout Egypt during the year under review together with the approximate area of darakat (zones) in acres.

TABLE No. 77,--SHOWING AREAS CONTROLLED BY MALARIA STATIONS AND BRANCH STATIONS AND POPULATION AFFORDED PROTECTION

Province or Governorate	Station	Area Controlled in Feddans	Population Protected	Branch Station	Area Controlled in Feddans	Population Protected	Total		Remarks.
							Area	Population	
Canal	Ismailia	2,640	81,450	Nafisha	2,760	15,475			
				Wasfia	4,860	5,042			
				Abu Suer	9,120	13,470			
				Dabia	3,930	4,500			
				Ein Ghosien	3,060	3,450			
				Sarabium	3,780	4,460			
				Abu Sultan	2,880	4,010			
				Port Said	3,260	32,220	36,290	15,100	
				El Kobri	3,420	5,000			
				El Shallufa	3,600	4,200	14,820	69,200	
Damietta	Damietta				6,000	63,176	6,000	69,200	
Western Desert...	Sinai Wadi Natroun ...	5,900	3,811	Ikhimisa	700	130			Except Wadi Natroun.
				Baharia Oasis	1,731	5,700	8,331	9,641	
Southern Desert-	Dakhla		18,374	Kharga		6,400		24,774	

TABLE No. 77.—SHOWING AREAS CONTROLLED BY MALARIA STATIONS AND BRANCH STATIONS AND POPULATION AFFORDED PROTECTION (contd.)

Province or Governorate	Station	Areas Controlled in Feddans	Population Protected	Branch Station	Areas Controlled in Feddans	Population Protected	Total		Remarks
							Area	Population	
Bebera...	Idku	3,850	18,899	Mountazah Mamoura Maadia Idfina Nazlia Rashid El Tarh	2,200 3,100 2,100 2,520 2,220 2,220 3,200	1,274 9,854 12,289 25,684	21,360	68,000	Except Maadia, Naz., Tarh.
	Kafr el Dawar	6,300	43,637	Khorshid Teh el Baroud... .. Kom Hamada	1,900 2,700 2,460	1,833	13,360	45,470	Except Teh Baroud, Kom Hamada.
	Damanhour	9,620	95,002				9,620	95,002	
	Dessouk	6,960	35,350	Salmia	1,660	7,144	6,960	35,350	
	Fowa	5,760	26,801	Kallin	1,980	5,742	7,420	33,945	
	Kafr el Sheikh	7,500	20,727	Zaafaran	6,240	4,149	9,480	26,469	
	Biala	5,100	13,251	Sherbin Kafr el Garaida	2,223 1,200	14,231 14,015	14,760	145,646	
Dakahlia	Bilkas	4,020	14,986				4,020	14,986	Not yet opened.
	Mehalla el Kobra	6,780	132,443				6,780	132,443	
	Faraskour	8,440	2,851	Serw Zarka Damietta	1,380 2,700 6,000	6,332 63,176	18,520	71,459	Except Serw.

TABLE NO. 77.—SHOWING AREAS CONTROLLED BY MALARIA STATIONS AND BRANCH STATIONS AND POPULATION AFFORDED PROTECTION (Contd.)

Province or Governorate	Station	Areas Controlled in Feddans	Population Protected	Branch Station	Areas Controlled in Feddans	Population Protected	Total		Remarks
							Area	Population	
Dakablia ...	Dekernis ...	7,710	10,846	Kafr Abu Nasir ...	1,560	1,194			
				Beni Ebeid ...	2,280	5,887			
				Mansoura ...	12,920	84,480			
				Mit Gharni ...	2,640		27,410	102,407	
				Inshas ...	5,820	15,832			
				Faroukia ...	4,420	5,580			
				Tel el Kebir ...	3,720		20,020	48,627	
				Kafr Sakr ...	2,100				
				Faridia ...	2,200	3,800			
				Fakous ...	3,300	14,618			
				Zagagig ...	11,020	97,934	27,000	139,968	
				Hihya ...			8,050	51,670	
				Bentia ...	7,800	51,432			
				Kaliub ...	2,520	22,460			
				Shebin el Kanatir ...	2,460	18,130			
				Shoubra ...	2,340	17,100			
				The Barrage ...	1,008		24,288	140,012	Except the Barrage.
				Kafr el Ghatati ...					
				Kafr Tohormos ...					
				Dahshour ...			57,300	247,535	
							8,056	74,319	
				Sennouris ...	2,760		9,520	20,355	
							7,810	59,336	
				Abu Kirkas ...	2,250	21,637			
				Samalout ...	5,520	22,490			
				Beni Mazar ...	4,110	23,462			
				Sheikh Fadl ...	2,040	6,533	20,620	148,825	Except Maghagha Not yet opened
				Maghagha ...					
Menoufia ...	Shebin el Kom ...	8,050	51,670						
Kaliubia ...	Toukh ...	8,160	30,890						
Giza ...	Giza ...	27,300	247,535						
Fayoum ...	Fayoum ...	8,056	74,319						
	Abshaway ...	6,760	20,355						
Beni Suef ...	Beni Suef ...	7,810	59,336						
Minia ...	Minia ...	6,700	72,702						

TABLE NO. 78.—SHOWING PERMANENT STATIONS AND OUT-POSTS IN OPERATION DURING 1946
IN LOWER AND UPPER EGYPT

Province or Governorate	Permanent Station or Travelling Hospital	Outpost	No. of zones	Area of each Zone in Feddans (approx.)							Total Area in Feddans
				1	2	3	4	5	6	7	
Canal	Ismailia ...	—	1	2640	—	—	—	—	—	—	2640
		Nafisha	1	2760	—	—	—	—	—	—	2760
		Wasfia... ..	1	4860	—	—	—	—	—	—	4860
		Abu Souer	2	3880	5240	—	—	—	—	—	9126
		El Dabia	1	3930	—	—	—	—	—	—	3930
		Ein Ghosein	1	3060	—	—	—	—	—	—	3060
		Sarabium	1	3780	—	—	—	—	—	—	3780
		Abu Sultan	1	2880	—	—	—	—	—	—	2880
		Port Said	1	3260	—	—	—	—	—	—	3260
	36290										
Western Desert	Suez	—	1	7800	—	—	—	—	—	—	7800
		El Koubri	1	3420	—	—	—	—	—	—	3420
		El Shalufa	1	3600	—	—	—	—	—	—	3600
	14820										
	Wadi Natroun Siwa	—	4	1000	1600	1200	2100	—	—	—	5900
Ikhmisa		1	700	—	—	—	—	—	—	700	
Bahria		3	645	5355	5505	—	—	—	—	1731	
8331											
Southern Desert.	Kharga Oasis Dakhla Oasis	Same Procedure as in A. Gambia.									
	Idku	—	2	2000	1800	—	—	—	—	—	3800
Montazah		1	2200	—	—	—	—	—	—	2200	
Mamoura		1	3100	—	—	—	—	—	—	3100	
Tarh		1	3200	—	—	—	—	—	—	3200	
Maadieh		1	2100	—	—	—	—	—	—	2100	
Edfina		1	2520	—	—	—	—	—	—	2520	
Nazlia		1	2220	—	—	—	—	—	—	2220	
Rosetta		1	2220	—	—	—	—	—	—	2220	
21360											
Kafr elDawar	—	3	2400	1700	2200	—	—	—	—	6300	
	Khorshid	1	1900	—	—	—	—	—	—	1900	
	Teh el Baroud	1	2700	—	—	—	—	—	—	2700	
	Kom-Hamada	1	2560	—	—	—	—	—	—	2460	
	13360										
Gharbia	Damanhour	—	4	2400	2500	2300	2420	—	—	—	9620
		Desouk	5	1500	1260	1500	1440	1260	—	—	6960
	Fowa	Salmia... ..	1	1660	—	—	—	—	—	—	1660
		Kafrel Sheikh	4	1440	1980	1980	360	—	—	—	5760
	Biala	—	3	2400	2880	2220	—	—	—	—	7500
		Kallin	1	1980	—	—	—	—	—	—	1980
	—	—	3	1500	1380	2220	—	—	—	—	5100
		Sherbin	1	2220	—	—	—	—	—	—	2220
	El Zafaran... ..	—	2	3240	3000	—	—	—	—	—	6240
		Kafr el Garaida	1	1200	—	—	—	—	—	—	1200
	Mehalla el Kobra ...	Bilkas	2	1980	—	—	—	—	—	—	1020
		—	4	1680	1700	1700	1700	—	—	—	6780
	49420										
Menoufia	Shebin el Kom	—	4	1900	2100	2100	1950	—	—	8050	

**TABLE No. 78.—SHOWING PERMANENT STATIONS AND OUT-POSTS IN OPERATION DURING 1946
IN LOWER AND UPPER EGYPT (continued)**

Province or Governorate	Permanent Station or Travelling Hospital	Outpost	No. of zones	Area of each Zone in Feddans (approx.)							Total Area in Feddans
				1	2	3	4	5	6	7	
Dakahlia... ..	Faraskour ...	—	3	3720	2420	3300	—	—	—	—	8440
		Serw	1	1380	—	—	—	—	—	—	1380
		Zarka	2	1560	1140	—	—	—	—	—	2700
		Damietta	3	1800	2200	2000	—	—	—	—	66000
											18520
	Dikernes ...	—	3	2460	2850	2400	—	—	—	—	7710
		Kafr Abu Nasr	2	960	900	—	—	—	—	—	1860
		Mansoura	3	3560	4800	4560	—	—	—	—	12920
		Beni Ebeid... ..	2	1140	1140	—	—	—	—	—	22 0
		Mit Ghamr... ..	2	1440	1200	—	—	—	—	—	2640
										27410	
Sharkia	Belbeis ...	—	3	2160	1920	1980	—	—	—	—	6060
		Inshas	4	1200	1200	2100	1320	—	—	—	5826
		Faroukia	2	2520	1900	—	—	—	—	—	4420
		Tel el Kebir ...	1	3720	—	—	—	—	—	—	3720
											20020
	Abu Kebir ...	—	4	2010	1920	2070	2360	—	—	—	8360
		Kafr Sakr	2	1160	940	—	—	—	—	—	2100
		Faridia	1	2220	—	—	—	—	—	—	2220
		Fakous	2	1620	1680	—	—	—	—	—	3300
		Zagazig	6	1140	1980	1840	2160	1860	2040	—	11020
										27000	
Kaliubia	Toukh ...	—	3	2580	2820	2760	—	—	—	—	8160
		Benha	3	2340	2580	2880	—	—	—	—	7800
		Shebin el Kanater	2	1440	1020	—	—	—	—	—	2460
		Kaliub... ..	2	1320	1200	—	—	—	—	—	2520
		Shoubra	2	1140	1200	—	—	—	—	—	2340
		Barrage	4	137	216	420	235	—	—	—	1008
											24288
Giza	Giza	—	16	—	—	—	—	—	—	—	57300
		Kafr Ghatati ...	1	} same procedure as in Gambia							57300
		Kafr Tohormos...	1								
		Kafr Dahshour ...	1								
Fayoum	Fayoum ...	—	4	2856	1420	2460	1320	—	—	—	8056
		Itsa... ..	3	2560	1800	2400	—	—	—	—	6760
		Sennouris	2	1300	1460	—	—	—	—	—	2760
											12,576
Beni Suef ...	Beni Suef ...	—	6	1680	1200	1080	1620	1260	970	—	7810

**TABLE No. 78.—SHOWING PERMANENT STATIONS AND OUT-POSTS IN OPERATION DURING 1946
IN LOWER AND UPPER EGYPT (continued)**

Province or Governorate	Permanent Station or Travelling Hospital	Outpost	No. of zones	Area of each Zone in Feddans (approx.)							Total Area in Feddans
				1	2	3	4	5	6	7	
Minia	Minia	—	4	1750	1470	1560	1920	—	—	—	6700
		Abu Kirkas ...	3	780	510	960	—	—	—	—	2250
		Samalout ...	4	1560	1500	1260	1200	—	—	—	5520
		Beni Mazar ...	4	1080	1200	850	980	—	—	—	4110
		Sheikh Fadl ...	2	1200	840	—	—	—	—	—	2040
											20620
Assiut	Assiut	—	9	940	720	1230	1080	1320	1680	1260	11050
		Manfalout ...	3	2460	3360	2580	—	—	—	—	8400
		Moutia ...	1	810	—	—	—	—	—	—	810
		Abu Tig ...	2	1260	1360	—	—	—	—	—	2620
											22880
Girga	Souhag ...	—	6	1560	1550	1900	1560	1200	1560	—	9330
		Tahta ...	3	1300	850	960	—	—	—	—	3110
		Tema ...	3	1000	1350	1200	—	—	—	—	3550
		Manshah ...	1	1000	—	—	—	—	—	—	1000
											16990
	Girga ...	—	5	960	1440	1200	1200	1200	1200	—	6000
		Balyana ...	2	1020	1260	—	—	—	—	—	2280
											8280
	Nag Hamadi	—	6	1200	1200	1800	1240	1560	1340	—	8340
		Abu-Shusha ...	1	1440	—	—	—	—	—	—	1440
		Farshut ...	1	1320	—	—	—	—	—	—	1320
		El-Khazan ...	1	1000	—	—	—	—	—	—	1000
											12100
Qena	Qena ...	—	6	2040	1680	1720	1300	1800	1920	—	10460
		Luxor ...	8	900	660	1380	2040	2780	1020	1680	10260
		Adisat ...	1	2160	—	—	—	—	—	—	2160
		Armant ...	6	1500	1200	1540	1300	1420	1140	—	8100
		Isna ...	6	1230	1080	500	1410	900	900	—	6020
		Mataana ...	4	680	630	1230	1230	—	—	—	3770
		Dabia ...	2	1770	1230	—	—	—	—	—	3000
											33310
Aswan	Idfu ...	—	6	1350	1150	1400	1150	1200	1500	—	7750
		Kom Ombo...	7	1470	900	1200	1380	1020	1620	1140	8730
		Daraw ...	2	1380	1440	—	—	—	—	—	2820
		Asswan ...	6	1200	1080	2220	360	1680	3720	—	10260
		Ballana ...	9	3420	2940	1440	2400	2700	2460	1860	24420
				3120	4080						53980

Grand Total of area in Lower Egypt (approx.) = 278,489 Feddans.

“ “ “ “ “ Upper “ “ = 210,736 “

“ “ “ “ “ Egypt = 489,225

Blood Specimens and Results thereof.

Of a total of 91,917 blood specimens examined this year, 17,999 or 19 per cent were returned positive (both new infections and relapses).

Tables Nos. 79, 80 and 81 give the distribution of these specimens according to: (a) attendance at malaria units, (b) suspected persons in their homes and (c) persons undergoing a general examination. Table No. 79 deals with Lower Egypt, the Canal and Suez Governorates; table No 80 deals with Upper Egypt and Western and Southern Desert Governorates and table No. 81 deals with Egypt as a whole.

The ratio of the first category, persons attending malaria units, is highest since patients attending malaria units are mostly suffering from malaria.

New Infections and Relapses.

Of the 17,999 cases returned positive for malaria, 4,973 cases or 27 per cent were considered new infections and 13,026 relapses.

In addition to the above, the Fouad 1st Institute and hospital for tropical diseases examined blood specimens sent from different localities. Table No. 82 gives details of these specimens. Table No. 83 gives details of blood specimens examined by malaria branches annexed to Ancylostoma hospitals throughout the Country.

Malaria and Enlargement of the Spleen.

Table No. 84 gives a spleen index for persons not suffering from malaria, and persons suffering from benign or malignant malaria.

Malaria in Infants under one year.

Table No. 85 gives the malaria general ratio among infants under one year of age in Lower and Upper Egypt. Malaria in infants is always considered new infections.

Types of Malaria.

Tables Nos. 86 and 87 give the three types of malaria (benign, malignant and tertian) and percentage of each type to total specimens examined in the Governorates and Provinces in Lower and Upper Egypt.

Monthly Distribution of Malaria.

Tables Nos. 88, 89 and 90 give the monthly general distribution of malaria cases of all types in Lower Egypt, Upper Egypt and the whole of Egypt respectively.

Malaria Cases Reported in Governorates and Provinces during 1945 and 1946.

Table No. 91 gives malaria cases and deaths reported to the Statistical Department from the Governorates and Provinces during 1945 and 1946. It shows that there were 3,400 more cases and 34 less deaths than in 1945.

Survey of Mosquito Breeding Places.

Survey of mosquito breeding places was carried out by malaria units on the same lines as in previous years. Priority was given to breeding places infected with malaria or bilharzia vectors. These are reported to the Public Services Department, or other competent departments for their examination. Tables Nos. 92, 93, 94, and 95 give details of these activities.

Control Work.

Paris Green and D.D.T. were used by malaria units as larvicides and D.D.T. solutions for the control of adult mosquito. A total of 10,647.448 kgs. of Paris Green, 9,973 kgs.

of mazut and 1,001.230 kgs. of malariol and D.D.T. mixture were used by Lower Egypt units and 7, 021.837 kgs. of Paris Green and 99,742 kgs. of mazut were used by Upper Egypt units as shown in table No. 96. Permanent control measures were carried out by the Village Affairs Department who filled in an area of 449 feddans of ponds and marshes shown in tables Nos. 97 and 98.

Warnings and Contraventions.

Besides control work, malaria units observe the application of Malaria Law No. 1 of 1926. Warnings were served on offenders of the Law and contraventions drawn up for failure to fulfil requirements of these Warnings. Judgments were given in certain cases for the removal of source of offence at the expense of offenders. Tables Nos. 99 and 100 give details of the warnings and contraventions served in Upper and Lower Egypt.

Clinically Diagnosed Malaria Cases.

Table No. 102 gives the number of malaria cases diagnosed clinically by malaria units in Lower and Upper Egypt, and the quantities of drugs issued for the purpose.

Treatment and Drugs.

Drugs were issued to malaria cases after their microscopic examination. Table No. 103 gives details of various drugs distributed by malaria units in Lower and Upper Egypt.

Malaria Law No. 1 of 1926, Military Orders and Ministerial Arrêtés.

Law No. 78 of 1946 was published in the Official Journal No. 74 dated July 23, 1946, modifying certain provisions of Law No. 1 of 1926. Arrêtés were issued on April 21, 1946 forbidding rice cultivation within one kilometre—instead of two—round Mansoura, Damanhour and Mehalla el Kobra *Bandars*. An arrêté was issued on September 26, 1946 forbidding rice cultivation round Ras el Bar summer resort. Law No. 76 of 1946 was promulgated providing for the filling in of ponds and marshes and forbidding the creation of burrow-pits.

Propaganda.

Propaganda activities were carried out in conjunction with those of the Health Propaganda Section. Every means is employed to explain to the inhabitants the symptoms of malaria, causes of its spread, how the disease is contracted and methods of protection and treatment.

Complaints.

All complaints forwarded to the Section or its Units receive due consideration and the causes of the complaint removed.

TABLE No. 79.—SHOWING DISTRIBUTION OF BLOOD FILMS EXAMINED FOR LOWER EGYPT AND SUEZ GOVERNORATE DURING 1946

Category	No. of Specimens	Positive			
		New	Relapses	Total	%
(1) Attendance at malaria units.	35,993	4,312	6,587	10,899	30.2
(2) Suspected Cases from persons in their homes	4,111	251	434	685	16.6
(3) General examination	7,010	225	318	543	7.7
GRAND TOTAL	47,114	4,788	7,339	12,127	25.7

TABLE No. 80.—SHOWING DISTRIBUTION OF BLOOD FILMS EXAMINED FOR UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING 1946

Category	No. of Specimens	Positive			
		New	Relapses	Total	%
(1) Attendance at Malaria Units	13,539	96	1,644	1,740	12·0
(2) Suspected persons in their homes ...	22,034	16	1,730	1,746	7·0
(3) General examination	9,230	73	2,913	2,386	25·0
GRAND TOTAL	44,803	158	5,687	5,872	13·1

TABLE No. 81.—SHOWING DISTRIBUTION OF BLOOD FILMS FOR THE WHOLE OF EGYPT DURING 1946

Category	No. of Specimens	Positive			
		New	Relapses	Total	%
(1) Attendance at Malaria Units	49,532	4,408	8,231	12,639	25·0
(2) Suspected persons in their homes ...	26,145	267	2,164	2,431	9·0
(3) General Examination	16,240	298	3,631	2,929	18·0
GRAND TOTAL	91,917	4,973	13,026	17,999	19·0

TABLE No. 82.—SHOWING NUMBER OF SPECIMENS EXAMINED FOR MALARIA BY THE RESEARCH INSTITUTE DURING 1946

Category	No. of Blood Specimens	Positive Malaria		Mixed	Total Positive	%
		Benign	Malignant			
(1) Specimens from Hospital...	1,945	189	25	—	214	11·0
(2) Specimens from Stations and Out-Posts	35,296	795	116	1	912	2·58
(3) Specimens from Ancylostoma Units	1,412	153	8	—	161	11·4
Total... ..	38,653	1,137	149	1	1,287	5·58

**TABLE No. 83.—SHOWING NUMBER OF SPECIMENS EXAMINED BY MALARIA UNITS ATTACHED TO
ANCYLOSTOMA HOSPITALS IN EGYPT DURING 1946**

Ancylostoma Units	No. of Blood Specimens	No. of Positive Malaria Cases	Rate per Cent	Benign Tertian			Malignant Tertian		
				No.	New	Relapse	No.	New	Relapse
Fowa	4,200	3,069	49	1,380	115	1,265	689	99	590
Desouk	6,701	1,392	24	1,340	342	398	252	171	81
Kafr el Sheikh	4,085	1,511	57	1,343	731	61	162	64	104
Benba	1,710	174	10	157	116	39	17	16	1
Suez	368	46	1·5	26	4	22	20	3	17
Fayoum	6,317	910	10·9	765	186	570	145	42	193
Beni Suef ...	5,556	45	21·8	45	55	—	10	10	—
Fakous	155	103	64·3	93	76	17	7	3	4
TOTAL ...	11,092	6,447	20·73	5,139	2,207	2,932	1,808	408	900

**TABLE No. 84.—SHOWING MALARIA AND ENLARGEMENT OF THE SPLEEN IN UPPER
AND LOWER EGYPT DURING 1946**

Name of Station	Persons not infected with Malaria			Persons infected with B.T. Malaria			Persons infected with M.T. Malaria		
	No.	Posi	Rate	No.	Positive	Rate	No.	Positive	Rate
Idku	2,940	112	3·8	2,580	337	13	60	29	48·3
Kafr el Dawar.	3,617	—	—	673	—	—	9	—	—
Kafr el Sheikh.	47	3	6·3	111	7	6	2	1	50
Biala	88	12	12·2	1,594	—	—	4	—	—
Mehalla Kobra	671	6	·89	198	10	5	—	—	—
Belbeis	2,041	—	—	2,126	1,050	33·5	3,126	25	1·1
Abu Kebir ...	25	6	24	94	85	81	—	—	—
Fayoum	555	151	27·2	63	26	41·7	17	1	5·8
Luxor	21	21	100	—	—	—	—	—	—
TOTAL ...	10,014	311	3·1	8,439	1,515	17·9	3,218	66	2

TABLE NO. 85.—SHOWING MALARIA CASES FOR
CHILDREN LESS THAN ONE YEAR IN LOWER
AND UPPER EGYPT DURING THE YEAR 1946

Lower Egypt

Province or Governorate	No. of Specimens	Positive	%
Ismailia	6	2	33·3
Suez	28	—	—
Idku	380	141	37·1
Kafr El Dawar... ..	133	26	21·1
Desouk	86	19	21·1
Kafr el Sheikh... ..	8	8	100
Biala	41	14	28
Mehalla Kobra	—	—	—
Fareskour	78	6	17
Dekernis	181	36	19·9
Belbeis	173	72	41·6
Inshas	45	27	50
Abu Kebir	62	8	13
Toukh	75	35	50
TOTAL	1,397	389	30·1

Upper Egypt

Giza	1	—	—
Fayoum	22	3	13·5
Abshaway	424	150	35·3
Dakhla Oasis	90	16	17·17
Kharga	213	23	10·7
TOTAL	750	192	25·6

TABLE No. 86.—SHOWING NO. OF CASES ACCORDING TO MALARIA SPECIES IN LOWER EGYPT AND THE CANAL GOVERNORATE DURING THE YEAR 1946

Province or Governorate	Total of Speci- mens	Total of Positive Cases	%	Benign Tertian				Malignant Tertian				Quartan Malaria				Remarks
				No.	New	Relapses	Posit. %	No.	New	Relapses	%	No.	New	Relapses	%	
Canal ...	3,592	268	7.4	104	34	70	2.8	164	112	52	4.2	—	—	—	—	
Western Desert...	3,890	380	9.8	340	2	338	8.1	40	—	40	1.1	—	—	—	—	
Behera...	12,471	3,385	27.4	3,310	360	3,050	26.6	75	2	73	0.6	—	—	—	—	
Gharbia ...	4,687	1,960	41.7	1,923	424	1,499	41	3	32	5	0.7	—	—	—	—	
Menoufia ...	1,618	149	9.2	149	63	86	9.2	—	—	—	—	—	—	—	—	
Dakahlia ...	9,893	2,370	23.9	2,306	1,612	694	23.3	64.0	40	24	0.6	—	—	—	—	
Sharkia ...	8,576	2,710	31.6	2,603	1,717	886	30.3	107	75	32	1.2	—	—	—	—	
Kalubia ...	2,387	905	37.9	905	415	490	37.8	—	—	—	—	—	—	—	—	
Total ...	47,114	12,127	25.7	11,640	4,527	7,113	24.7	487	261	226	1.0	—	—	—	—	

TABLE No.87.—SHOWING NO. OF CASES ACCORDING TO MALARIA SPECIES IN UPPER EGYPT AND THE SOUTHERN DESERT GOVERNORATE DURING 1946

Province or Governorate	Total of Specimens	Total of Positive Cases	%	Benign Tertian			Malignant Tertian			Quartan Malaria			Remarks			
				No.	New	Relapses	%	No.	New	Relapses	%	No.		New	Relapses	%
Giza ...	1,931	72	3.7	64	—	64	3.3	8	—	8	—	—	—	—	—	—
Fayoum ...	8,855	3,073	34.7	2,914	115	2,799	32.9	159	7	152	—	—	—	—	—	—
Minia ...	461	56	12.1	53	33	20	11.4	3	—	3	—	—	—	—	—	—
Assiut ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Girga ...	6,602	100	2.7	76	—	75	2.1	24	—	24	—	—	—	—	—	—
Southern Desert ...	9,713	1,155	11.8	889	21	868	9.2	266	2	264	—	—	—	—	—	—
Qena ...	12,274	423	3.4	386	7	379	3.1	36	—	36	—	1	—	—	—	.008
Aswan...	7,967	993	12.4	984	—	984	12.3	9	—	9	—	—	—	—	—	—
Total ...	44,803	5,872	13.1	5,366	176	5,1	11.9	505	9	496	1	—	1	—	—	.008

TABLE No. 88.—SHOWING MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN LOWER EGYPT AND THE CANAL AND SUEZ GOVERNORATES DURING 1946

Month		Total of Specimens	Total of Positive Cases	%	BENIGN TERTIAN				MALIGNANT TERTIAN				REMARKS
					No.	New	Relapses	%	No.	New	Relapses	%	
January ...	... ..	1,455	217	14.9	187	63	124	12.8	30	11	19	2.0	
February...	... ..	2,122	280	8.0	169	57	108	7.8	13	5	8	0.61	
March ...	... ..	2,426	224	9.0	211	69	142	8.6	13	1	12	0.53	
April ...	... ..	3,559	300	8.0	490	71	219	8.0	10	2	8	0.28	
May ...	... ..	4,493	608	13.0	599	169	430	13.0	6	4	5	0.20	
June ...	... ..	5,458	1,063	19.0	1 044	465	584	19.0	14	7	7	0.25	
July ...	... ..	5,013	1,501	29.5	1,487	501	986	29.0	14	7	7	0.27	
August ...	... ..	4,936	1,754	35.5	1,722	632	1,090	36.8	32	12	20	0.6	
September	... ..	7,181	2,815	39.0	2,702	1,102	1,600	37.6	113	93	20	1.5	
October ...	... ..	5,774	2,081	36.0	1,981	1,054	927	34.0	100	62	38	1.7	
November	... ..	2,549	857	33.7	776	274	529	30.4	81	39	42	3.0	
December	... ..	2,148	527	24.5	496	95	374	21.8	58	18	40	2.7	
TOTAL		47,114	12,127	25.7	11,640	4,527	7,113	24.7	487	261	226	1.0	

TABLE NO. 89—SHOWING MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN UPPER EGYPT AND THE SOUTHERN DESERT GOVERNORATE
DURING THE YEAR 1946

Month	Total of Specimens	Total of Positive Cases	%	BENIGN MALARIA				MALIGNANT MALARIA				QUARTAN MALARIA				REMARKS
				No.	New	Relapses	%	No.	New	Relapses	%	No.	New	Relapses	%	
January	618	138	22.3	123	15	108	19.9	15	1	14	2.4	—	—	—	—	
February	1,381	140	10.1	75	4	71	5.4	65	2	63	4.7	—	—	—	—	
March	1,695	232	10.0	180	13	167	10.5	52	—	53	3.1	—	—	—	—	
April	3,195	212	6.7	160	12	148	5.08	52	—	52	1.6	—	—	—	—	
May	4,328	353	8.1	303	20	283	7.02	59	—	50	0.7	—	—	—	—	
June	3,150	397	10.05	367	27	340	9.02	30	2	28	0.5	—	—	—	—	
July	3,977	506	12.7	485	33	452	12.2	21	2	19	0.5	—	—	—	—	
August	2,904	591	20.0	445	15	530	18.7	46	—	46	1.5	—	—	—	—	
September	4,826	967	20.0	911	9	912	19.0	46	2	44	0.9	—	—	—	—	
October	7,529	1,340	17.7	1,303	24	729	17.3	36	—	36	0.4	1	—	1	0.01	
November	5,627	677	12.06	631	2	629	11.2	46	—	46	0.8	—	—	—	—	
December	4,832	318	6.5	273	2	271	5.6	45	—	45	0.9	—	—	—	—	
TOTAL	44,803	5,872	13.1	5,365	176	5,190	11.9	505	9	496	1.1	1	—	1	0.002	

TABLE NO. 90.—SHOWING MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN THE WHOLE OF EGYPT DURING THE YEAR 1946

Months	Total of Speci- mens	Total of Positive Cases	%	Benign Tertian				Malignant Tertian				Quartan Malaria				Remarks
				No.	New	Relapses	%	No.	New	Relapses	%	No.	New	Relapses	%	
January	2,073	355	17.0	310	78	2	14.9	45	12	33	2.1	—	—	—	—	
February	3,503	320	9.1	242	63	179	7.0	78	7	71	2.2	—	—	—	—	
March	4,121	457	11.0	391	82	303	9.4	66	1	65	1.6	—	—	—	—	
April	6,704	512	7.6	450	83	357	6.7	62	2	60	0.9	—	—	—	—	
May	8,821	961	10.9	902	189	713	10.2	59	4	55	0.7	—	—	—	—	
June	9,408	1,460	15.5	1,416	492	924	15.0	44	9	35	0.5	—	—	—	—	
July	8,990	2,007	22.3	1,972	534	1,438	21.9	35	9	26	0.4	—	—	—	—	
August	7,840	2,345	29.9	2,267	647	1,620	28.9	78	12	66	0.1	—	—	—	—	
September	12,007	3,782	31.4	3,623	1,111	2,512	30.1	159	95	64	1.2	—	—	—	—	
October	13,303	3,421	25.7	3,284	1,078	2,206	24.6	136	64	74	3.1	1	—	1	0.007	
November	8,176	1,531	18.7	1,407	249	1,158	17.2	127	39	88	1.5	—	—	—	—	
December	6,971	845	12.1	742	97	645	10.6	103	18	85	1.5	—	—	—	—	
TOTAL	91,917	17,999	19.0	17,066	4,703	12,363	18.0	992	279	722	1.0	1	—	1	0.001	

**TABLE No. 91.—SHOWING NUMBER OF MALARIA CASES AND
DEATHS NOTIFIED DURING THE YEARS 1945 AND 1946**

PROVINCE OR GOVERNORATE	1945		1946		Difference	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Cairo	267	11	212	2	— 55	— 9
Alexandria	291	4	208	5	— 83	+ 1
Other Governorates	758	9	544	3	— 214	— 6
Behera	1,438	1	2,410	1	+ 972	—
Gharbia	851	3	2,148	—	+ 1,297	— 3
Dakahlia... ..	573	7	485	—	— 88	— 7
Menoufia... ..	23	—	63	—	+ 40	—
Sharkia	553	2	683	2	+ 130	—
Kaliubia... ..	489	—	626	1	+ 137	+ 1
Giza... ..	44	—	109	—	+ 65	—
Fayoum	484	1	1,622	3	+ 1,138	+ 2
Beni-Suef	43	2	34	1	— 9	— 1
Minia	15	—	52	—	+ 37	—
Assiut	13	1	4	—	— 9	— 1
Girga	6	2	25	1	+ 19	— 1
Qena	6	8	8	3	+ 2	— 5
Aswan	3	5	29	—	+ 26	— 5
TOTAL	5,857	56	9,262	22	+ 3,405	— 34

TABLE No. 92.—SURVEY OF ANOPHELINE LARVAE IN DIFFERENT BREEDING PLACES IN LOWER EGYPT AND CANAL AND SUEZ GOVERNORATES DURING 1946

Province or Governorate	Unit	Nile Banks or Canal				Ditches				Seepage				Surface Water				Fields				Aquatic plants		Wells and Sakias				Other Places					
		Pharoen.	Multicolor	Sergenti	Maurit.	Other species	Pharoen.	Multicolor	Sergenti	Maurit.	Other species	Pharoen.	Multicolor	Sergenti	Maurit.	Other species	Pharoen.	Multicolor	Sergenti	Maurit.	Other species	Pharoen.	Multicolor	Sergenti	Maurit.	Other species	Pharoen.	Multicolor	Sergenti	Maurit.	Other species		
Canal	... Ismailia ...	—	—	—	—	—	100	9	9	17	—	3	1	2	—	—	121	27	23	22	—	—	—	2	9	—	1	—	—	—	—	3	
	... Suez...	5	2	1	5	—	18	19	—	6	—	—	—	—	1	—	1	9	1	2	—	—	—	—	7	—	—	—	—	—	—	—	
Western Desert	Baharia Oasis	—	—	—	—	—	—	1	—	—	—	—	1	2	—	—	—	4	6	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Behera	—	—	—	—	—	20	—	—	—	—	6	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Gharbia	... Idku ...	—	—	—	—	—	86	6	—	10	—	26	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	... Kafr el Dawar	—	—	—	—	—	86	2	—	6	—	55	5	1	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	... Dessouk ...	—	—	—	—	—	19	—	1	2	3	11	—	—	—	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	... Fowa ...	—	—	—	—	—	70	3	—	8	—	—	—	—	—	—	25	2	—	11	—	—	—	—	—	—	—	—	—	—	—	—	
Menoufia	... Kafr el Sheikh	—	—	—	—	—	62	38	8	20	—	3	—	—	—	—	12	6	1	3	—	—	—	2	1	—	—	—	—	—	—	—	
	... Biala ...	—	—	—	—	—	17	—	—	—	—	24	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Dakahlia	... Mehalla Kobra	—	—	—	—	—	38	10	—	3	—	53	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	... Shebin el Kom	—	—	—	—	—	60	3	—	57	—	13	—	—	11	—	1	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	
Sharkia	... Faraskour	1	—	—	—	—	118	—	—	1	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	... Dekernis	—	—	—	—	—	76	—	—	—	—	—	—	—	—	—	19	—	—	7	—	—	—	—	—	—	—	—	—	—	—	—	
	... Belbeis ...	—	—	—	—	—	107	7	—	7	—	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Kaliubia	... Insbas ...	—	—	—	—	—	21	—	—	—	—	4	—	—	—	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	... Abu Kebir	—	—	—	—	—	2	5	—	—	—	130	52	—	2	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Toukh	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	TOTAL	6	2	1	5	—	902	103	37	137	3	360	87	5	19	1	196	48	31	51	3	105	9	4	24	3	67	1	21	17	53	1	11

TABLE No. 93.—SURVEY OF ANOPHELINE LARVAE IN DIFFERENT BREEDING PLACES IN UPPER EGYPT DURING 1946

Province or Governorate	Unit	Nile banks or Canal				Ditches				Seepage				Surface Water				Fields				Aquatic Plants		Wells and Sakias				Other Places						
		Pharoen.	Multie.	Sergenti.	Maurit.	other species.	Pharoen.	Multie.	Sergenti.	Maurit.	other species.	Pharoen.	Multie.	Sergenti.	Maurit.	other species.	Pharoen.	Multie.	Sergenti.	Maurit.	other species.	Pharoen.	Multie.	Pharoen.	Multie.	Sergenti.	Maurit.	other species.	Pharoen.	Sergenti.				
Giza ...	Giza ...	—	—	—	—	—	50	—	—	—	52	—	—	—	—	—	11	—	—	—	—	—	—	7	—	—	—	—	—	—	Pharoen.	Sergenti.		
Fayoum ...	Fayoum ...	—	—	—	—	—	2	2	3	—	3	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
	Abshaway ...	—	—	—	—	—	5	5	6	—	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
Beni Suef ...	Beni Suef ...	1	—	—	—	—	30	—	—	—	41	—	—	—	—	—	13	—	—	—	—	—	1	—	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
Minia ...	Minia ...	—	—	—	—	—	144	1	—	—	75	1	—	—	—	—	13	—	—	—	—	—	11	—	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
	Samalout ...	3	—	—	—	—	—	—	—	—	9	—	—	—	—	—	—	—	—	—	—	6	—	—	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
Assiut ...	Assiut ...	—	—	—	—	—	10	—	—	—	79	—	—	—	—	—	13	—	—	—	—	—	27	—	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
Girga ...	Souhag ...	—	—	—	—	—	21	—	—	—	119	1	—	—	—	—	4	—	—	—	—	8	—	3	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
	Girga ...	—	—	—	—	—	5	—	—	—	98	—	—	—	—	—	30	—	—	—	—	33	3	5	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
Southern Desert	Kharga Oasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
Qena ...	Nag Hamadi	1	—	—	—	—	101	—	1	—	69	—	—	—	—	—	53	—	—	—	—	12	—	1	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
	Qena ...	20	—	—	5	—	14	2	—	—	78	—	—	—	—	—	25	—	—	—	—	15	44	—	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
	Luxor ...	19	1	—	—	—	13	—	—	—	31	—	—	—	—	—	17	—	—	—	—	1	—	—	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
	Mataana ...	—	—	—	—	—	30	—	—	—	37	88	—	—	—	—	1	—	—	—	—	7	—	—	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
Aswan ...	Idfu ...	52	7	1	—	—	121	9	2	—	207	12	4	—	—	—	8	1	—	—	—	46	1	3	1	2	—	—	—	—	—	Pharoen.	Sergenti.	
	Kom Ombo	8	3	—	—	—	30	14	—	1	77	26	—	—	—	—	20	2	—	—	—	11	2	—	—	—	—	—	—	—	—	Pharoen.	Sergenti.	
	Aswan ...	8	—	—	—	—	26	7	2	—	28	4	3	—	2	—	2	—	—	—	—	—	—	—	18	4	—	—	—	—	—	Pharoen.	Sergenti.	
	TOTAL ...	123	11	6	—	—	652	41	14	1	1001	134	12	1	2	210	3	2	—	—	—	139	47	6	47	2	—	—	—	—	—	9	Pharoen.	Sergenti.

TABLE No. 94.—SHOWING NO. OF VILLAGES SURVEYED AND BIRKAS FOUND HARBOURING EITHER LARVAE OF ANOPHELES, CULEX PAPIENS OR BILHARZIAL SNAILS IN LOWER EGYPT AND CANAL ZONE DURING THE YEAR 1946

Provinces or Governorate	Station	No. of Villages surveyed	No. of Birkas examined	Total Positive	Birkas harbouring Anopheles Larvae						Birkas Harboursing					
					Pharoen.		Multicolor		Sergenti		Other Species		Bilharz. Snails		Culex Pipiens	
					No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %
					No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %
Canal {	Ismailia {	9	1,916	192	117	6.0	5	0.16	20	1.0	50	2.6	—	—		
	Suez {	3	16	13	1	6.0	9	43.0	1	6.2	2	12.5	—	—		
	El Natroun {	—	—	—	—	—	—	—	—	—	—	—	—	—		
	Siwa {	—	—	—	—	—	—	—	—	—	—	—	—	—		
Baharia Oasis {	Baharia Oasis {	4	13	13	—	—	4	30.7	9	69.2	—	—	—	—		
	Idku {	—	—	—	—	—	—	—	—	—	—	—	—	—		
	Kafr el Dawar {	11	13	1	1	7.0	—	—	—	—	—	—	—	—		
	Dessouk {	—	—	—	—	—	—	—	—	—	—	—	—	—		
Fowa {	Fowa {	2	5	8	4	80.0	—	—	2	40.0	2	40.0	—	—		
	Biala {	4	12	—	—	—	—	—	—	—	—	—	—	—		
	Kafr el Sheikh {	2	2	2	1	50.0	—	—	—	—	1	50.0	—	—		
	Mehalla el Kobra {	—	—	—	—	—	—	—	—	—	—	—	—	—		
Menoufia {	Shebin el Kom {	21	49	49	34	69.0	15	30.0	—	—	—	—	—	—		
	Faraskour {	4	6	—	—	—	—	—	—	—	1	25.0	—	—		
Dakahlia... .. {	Dekernis {	9	26	10	10	38.0	—	—	—	—	—	—	—	—		
	Belbeis {	3	28	2	14	50	—	—	—	—	7	25.0	—	—		
Sharkia... .. {	Inshas {	3	16	19	10	62.5	—	—	—	—	9	56.0	—	—		
	Abu Kebir {	6	5	—	—	—	—	—	—	—	—	—	—	—		
Kaliubia {	Toukh {	32	77	40	24	31.0	15	19.0	—	—	1	1.0	—	1.0		
	Total {	119	2,186	369	216	9.8	48	2.0	35	1.4	75	9.0	—	5.0		

TABLE No. 95.—SHOWING NO. OF VILLAGES SURVEYED AND BIRKAS HARBOURING OTHER LARVAE OF ANOPHELES, CULEX PIPIENS AND BILHARZIAL
 SNAILS IN UPPER EGYPT DURING THE YEAR 1946

Province or Governorate	Station	No. of Villages surveyed	No. of Birkas examin.	Total Positive	Birkas Harboursing Anopheles Larvae						Birkas Harboursing			
					Pharoen.		Multicolor.		Sergenti		Other Species		Bilharz. Snails	Culex Pipiens
					No.	%	No.	%	No.	%	No.	%		
Giza	Giza...	69	235	90	3.8	—	—	3	75.0	1	25.0	—	132	6.1
Fayoum	Fayoum ...	2	4	7	75.0	—	—	3	75.0	1	25.0	—	—	—
	Abshaway	1	1	1	100.0	—	—	—	—	—	—	—	—	—
Beni Suef	Beni Suef	6	2	2	100.0	—	—	—	—	—	—	—	2	100.0
Minia	Minia ...	3	6	3	333.0	—	—	—	—	—	—	—	—	—
	Samalout	—	—	—	—	—	—	—	—	—	—	—	—	—
Assiut	Assiut ...	—	—	—	—	—	—	—	—	—	—	—	—	—
	Manfalout	2	6	—	—	—	—	—	—	—	—	—	—	—
Girga	Suhag	3	9	—	—	—	—	—	—	—	—	—	—	—
	Girga	—	—	—	—	—	—	—	—	—	—	—	—	—
Qena	Nag Hamadi ...	63	2278	24	8.6	—	—	—	—	—	—	—	—	—
	Qena ...	—	—	—	—	—	—	—	—	—	—	—	—	—
	Luxor ...	1	2	—	—	—	—	—	—	—	—	—	—	—
	Mataana ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Aswan	Edfu ...	10	17	16	82.3	1	5.8	1	5.8	—	—	—	—	—
	Kom Ombo ...	1	2	2	50.0	1	50.0	—	—	—	—	—	—	—
	TOTAL	160	562	144	24.3	2	35.0	4	0.71	1	17	—	134	2.38

TABLE NO. 96.—SHOWING QUANTITIES OF PARIS GREEN
AND MAZUT CONSUMED DURING THE YEAR 1946

District	Province or Governorate	Station	Quantities Consumed	
			Paris Green in Kilograms	Mazut in Kilograms
Lower Egypt ...	Canal ...	Ismailia ...	1,344	3,575
		Suez ...	561·290	—
	Western Deser ^t	Siwa ...	200	—
		Baharia Oasis ...	460	—
	Behera ...	Idku ...	1,449·600	Mal. DDT
		Kafr el Dawar...	182·586	300 . 230 & 1001
	Gharbia ...	Dessouk ...	655	—
		Fowa ...	135	—
		Kafr El Sheikh...	879·500	—
		Biala ...	336	—
		Mehalla Kobra...	153·742	—
	Menoufia ...	Shebin el Kom...	844·360	—
	Dakahlia ...	Faraskour...	1,173·755	988
		Dekernis...	88·852	501
	Sharkia ...	Belbeis ...	354	—
		Inshas ...	330	280
		Abu Kebir ...	302	—
	Kaliubia ...	Toukh ...	1,197·763	3,829
		TOTAL ...	10,647·448	Mal. 9973 . 320 & 1001 DDT
Upper Egypt ...	Giza ...	Giza ...	441	99,742
	Fayoum...	Fayoum ...	116·730	—
		Abshaway...	1,087	—
	Beni Suef ...	Beni Suef...	41	—
	Minia... ..	Minia... ..	830·470	—
	Assiut	Assiut ...	516	—
	Girga ...	Sohag ...	440·174	—
		Girga ...	580·800	—
	Qena ...	Nag Hamadi ...	66·436	—
		Qena ...	124·870	—
		Luxor ...	374·600	—
	Aswan ...	Idfu ...	770·857	—
		Kom Ombo ...	1·384	—
		Aswan ...	248	—
		TOTAL ...	7,021·837	99,742

TABLE No. 97.—DETAILS OF BIRKAS FILLED IN BY THE VILLAGE AFFAIRS DEPARTMENT DURING 1945-1946

No.	Province or Governorate	No. of Birkas	Approximate Area			Costs		Remarks
			Fed.	Kirat	Sahm	L.E.	Mills.	
1	Behera	26	39	23	13	15,956	167	
2	Dakablia	27	57	9	21	42,760	282	
3	Sharkia	12	49	21	7	39,256	860	is being carried out
4	Gharbia	19	13	1	17	8,070	200	
5	Kaliubia	38	36	7	4	8,382	117	..
6	Menoufia	35	50	8	12	27,763	193	
7	Giza	24	27	11	17	12,434	035	
8	Beni Suef	24	11	4	12	2,314	104	..
9	Fayoum	7	16	8	--	5,967	117	
10	Minia... ..	30	25	19	1	17,850	304	..
11	Assiut	181	118	13	9	37,558	48	.. ..
12	Girga... ..	17	22	37	23	3,996	232	
	TOTAL ...	450	449	7	16	282,289	909	

TABLE No.98.—BIRKAS FILLED IN BY THE INHABITANTS DURING 1946 UNDER PROVISIONS OF MILITARY ORDER No. 363 ISSUED ON JANUARY 19, 1943.

Locality	No. of Birkas	Approximate Area			Remarks
		Feddan	Kirat	Sahm	
Ismailia (Canal) ...	4	8	13	—	
Toukh (Kaliubia) ...	7	3	13	—	
Fayoum	2	2	22	21	
Minia	27	24	1	12	
TOTAL	40	39	2	9	

TABLE No. 99.—SHOWING NO. OF WARNINGS AND P.Vs. OF CONTRAVENTION DRAWN UP BY MALARIA
UNITS AND THEIR BRANCHES IN LOWER EGYPT AND CANAL ZONE DURING 1946

Province or Governorate	Unit	Burrow pits or Puddles		Filling in or covering over disused wells or Sakias and Abolishing pumps		Clearing Drains or Miskas		Clearing Ponds or Marshes		Prohibition of Rice and Sugar Cane Cultivation		Remarks
		Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.	
Canal	Ismailia	19	6	2	—	128	9	—	—	—	—	
	Suez	—	—	21	—	119	—	—	—	—	—	
Western Desert ...	El Natroun ...	—	—	—	—	—	—	—	—	—	—	
	Siwa	—	—	—	—	—	—	—	—	—	—	
Behera	Baharia Oasis ...	—	—	1	—	30	—	—	—	—	—	
	Kafr el Dawar ...	34	14	—	—	93	30	—	—	—	252	
	Idku	—	—	—	—	157	108	—	—	120	1	
	Dessouk	—	—	—	—	—	—	—	—	—	—	
Gharbia	Fowa	—	—	—	—	—	—	—	—	—	—	
	Kafr el Sheikh ...	—	—	—	—	—	—	—	—	—	—	
	Biala	—	—	—	—	36	—	1	—	—	—	
	Mehalla Kobra ...	—	—	—	—	—	—	—	—	—	64	
Menoufia... ..	Shebin el Kom ...	—	—	4	2	7	—	—	—	—	—	
Sharkia	Belbeis	—	—	—	—	—	—	—	—	—	—	
	Inshas	—	—	—	—	—	—	—	—	—	—	
	Abu Kebir	—	—	—	—	4	—	—	—	—	—	
	Fareskour	—	—	—	—	13	—	—	—	—	—	
Dakahlia	Dekernis	—	—	—	—	—	3	—	—	—	100	
Kaliubia	Toukh	—	—	27	15	—	—	—	—	—	4	
	TOTAL	53	22	57	17	587	150	1	—	120	421	

TABLE No.100—SHOWING NO. OF WARNINGS AND P.Vs OF CONTRAVENTIONS DRAWN UP BY MALARIA
UNITS AND THEIR BRANCHES IN UPPER EGYPT DURING 1946

Province or Governorate	Unit	Burrow Pits or Puddles		Filling in or covering over disused wells or Sakias and Abolishing pumps		Clearing Drains or Miskas		Clearing Ponds or Marshes		Prohibition of Rice and Sugar-cane Cultivation		Remarks
		Ws	P.Vs	Ws	P.Vs	Ws	P.Vs	Ws	P.Vs	Ws	P.Vs	
Giza... ..	Giza	—	—	44	18	—	2	—	—	—	—	
Fayoum	Fayoum	—	—	—	—	5	—	—	—	—	—	
	TOTAL	—	—	44	18	5	2	—	—	—	—	

TABLE NO. 101.—SHOWING THE RESULTS OF BLOOD SPECIMENS EXAMINED
FOR FILARIA BY RESEARCH INSTITUTE DURING 1946

Locality	No. of Specimens	Returned Positive	Rate per cent
Canal	2,418	4	0·15
Zagazig	190	3	1·57
Belbeis	233	12	5·10
Dekernis	86	—	—
Idku	264	—	—
Kafr el Dawar	199	—	—
Fowa	1,989	68	3·42
Shebin El Kom	505	1	0·18
Giza	678	26	3·83
Fayoum	2,000	—	—
Kom Ombo	197	—	—
Southern Desert	1,093	—	—
Total	10,502	114	—

**TABLE NO. 102.—SHOWING NUMBER OF CASES DIAGNOSED CLINICALLY AND QUANTITIES
OF DRUGS DELIVERED BY MALARIA STATIONS DURING 1946**

Station	Clinically diagnosed	Quantities of Drugs Consumed							
		Qu. 5 gr.	Qu. 2 gr.	Qu. Ch.	Atebrine	Plas.comp. 1 cgm.	Janqui- nine grams	Aspirene	Blood Tablets
Ismailia	5	100	—	—	—	—	—	—	—
Wadi El Natroun	34	—	—	—	510	—	—	—	—
Siwa	75	—	—	—	1,575	—	—	—	—
Edku	675	480	—	—	7,531	—	0·064	—	—
Kafr-el-Dawar	90	—	—	—	180	—	0·043	—	4,945
Fowa	30	—	—	—	1,000	—	—	—	—
Kafr-el-Sheikh ...	31	—	—	—	1,200	—	—	—	—
Biala	50	140	20	—	582	—	—	—	—
Mehalla Kobra	592	—	—	—	3,759	—	—	—	—
Shebin el Kom	260	—	—	—	3,900	—	—	—	—
Dekernis	1,567	183	—	—	17,165	—	—	—	5,060
Abu Kebir ...	360	720	135	—	1,390	—	—	—	3,299
Toukh	28	—	—	—	420	—	—	84	557
TOTAL ...	3,797	1,623	155	—	39,212	—	0·107	84	13,861
Giza	11	—	—	—	59	—	—	—	95
Fayoum	182	—	—	—	8,158	—	—	—	—
Abshaway	4,833	988	562	10,210	61,968	—	—	—	—
Minia	4	—	—	—	72	—	—	—	850
Assiut	2	—	—	—	42	—	—	—	—
Suhag	11	63	—	—	151	—	—	—	—
Girga	75	—	—	—	11,701	—	—	—	—
Dakbla Oasis ...	154	—	—	—	667	—	—	—	—
Nag Hamadi ...	2,479	—	—	1,528	45,468	175	—	—	23,168
Luxor	4,561	3,527	5,587	—	473,407	23,198	—	—	—
Mataana	8,338	172	1,500	900	200,851	2,000	—	—	—
Idfu	309	—	—	—	2,288	—	—	—	—
Kom Ombo ...	8,628	—	—	7,253	114,940	—	—	—	—
Aswan	4,220	—	—	2,162	43,775	408	—	—	—
TOTAL ...	34,477	4,750	7,649	13,053	963,547	25,781	—	—	24,113

TABLE No.103.— QUANTITIES AND KINDS OF DIFFERENT DRUGS CONSUMED FOR
TREATMENT OF POSITIVE CASES IN UPPER AND LOWER EGYPT DURING 1946

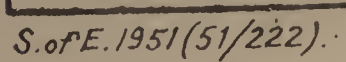
Kinds of Drugs	Drugs Consumed		Total
	Lower Egypt	Upper Egypt	
Quinin 5 grms.	12,051	4,163	16,714
Quinin 2 grms.	4,876	4,851	4,727
Quinin Chocolate	4,441	58,241	62,682
Plasmochine comp. 1 cgm.	1,947	11,236	15,183
„ Simple	1,256	8,588	9,842
Atebrine	25,732	640,444	876,176
Blood Tablets	74,139	188,139	262,278



محطات ومأموريات الملازي
مقياس الرسم ١: ١٠٠,٠٠٠

DISTRIBUTION OF MALARIA STATIONS

PRINCIPAL STATION.....●.....محطة رئيسية
HOSPITALS (Acting as P.S.).....○.....مأمرية
OUTPOSTS.....⊕.....مأمرات لم تفتح بعد



مديرية الفيوم

(حملة مقاومة البعوض بالفيوم)

مقياس الرسم ١:٣٠٠,٠٠٠

اصطلاحات

١ و ٢ و ٣ مناطق مقاومة اليرقات بأنضربا ريس مبدئيا خلال سنة ١٩٤٦
دائرة الفيوم أجريت بها تجريبية مقاومة اليرقات من ١٥/٩/١٩٤٦
بال د.د.ت + الملائبول بنسبة ٥%

عزبة خورشيد وعزبة أجريت بهما تجريبية دهان المنازل بال د.د.ت +
الكروسين بنسبة ٥% لمعرفة تكاليف الحملة ونتائج الدهان (من ١٥/٦/٤٧ إلى ٢٠/٦/٤٧)

دركات دائرة الفيوم من ١٠١ - ١٤٦

سنورس " " ٢٠١ - ٢٤٧

ابشواي " " ٣٠١ - ٣٣٤

اطسا " " ٤٠١ - ٤٤٨

عدد السكان : ٦٦٠,٠٠٠ نسمة

المنزل : ١٦٥,٠٠٠ منزل

جملة الزمام : ٤١٣,٠٠٠ فدان

المنزع : ٣١٠,٠٠٠ " "

عدد الدركات : ١٧٥ دركا

MUDIRIYET EL-FAIYUM

(MOSQUITO CONTROL CAMPAIGN)

Scale 1:300,000

REFERENCES

1,2,3. Zones of Larviciding (Paris Green) During 1946.
Exp. in Faiyum District (from 15/9/46) D.D.T. Sol. in
Malariol (5%).

Exp. in Khorshid and Arafa Ezbas (from 15 to 20/6/46)
D.D.T. in Kerosine (5%).

Faiyum Darakats Nos. 101-146

Sinnûris " " 201-247

Abshawai " " 301-334

Itsa " " 401-448

Population 660,000 Inhabitants

No. of houses 165,000 Houses

Total Area 413,000 Feddans

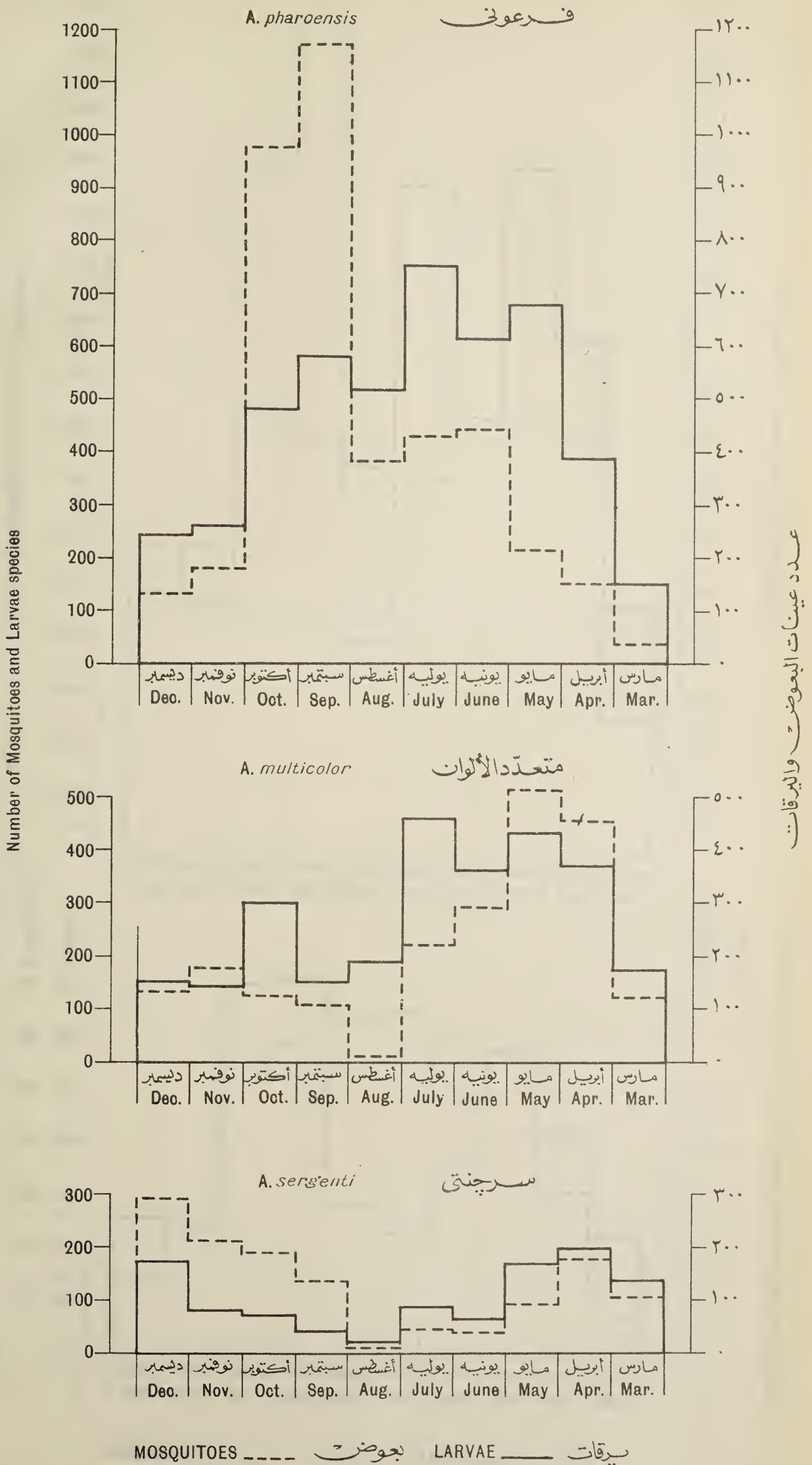
Cultivated Area 310,000 " "

Total No. of Darakats 175

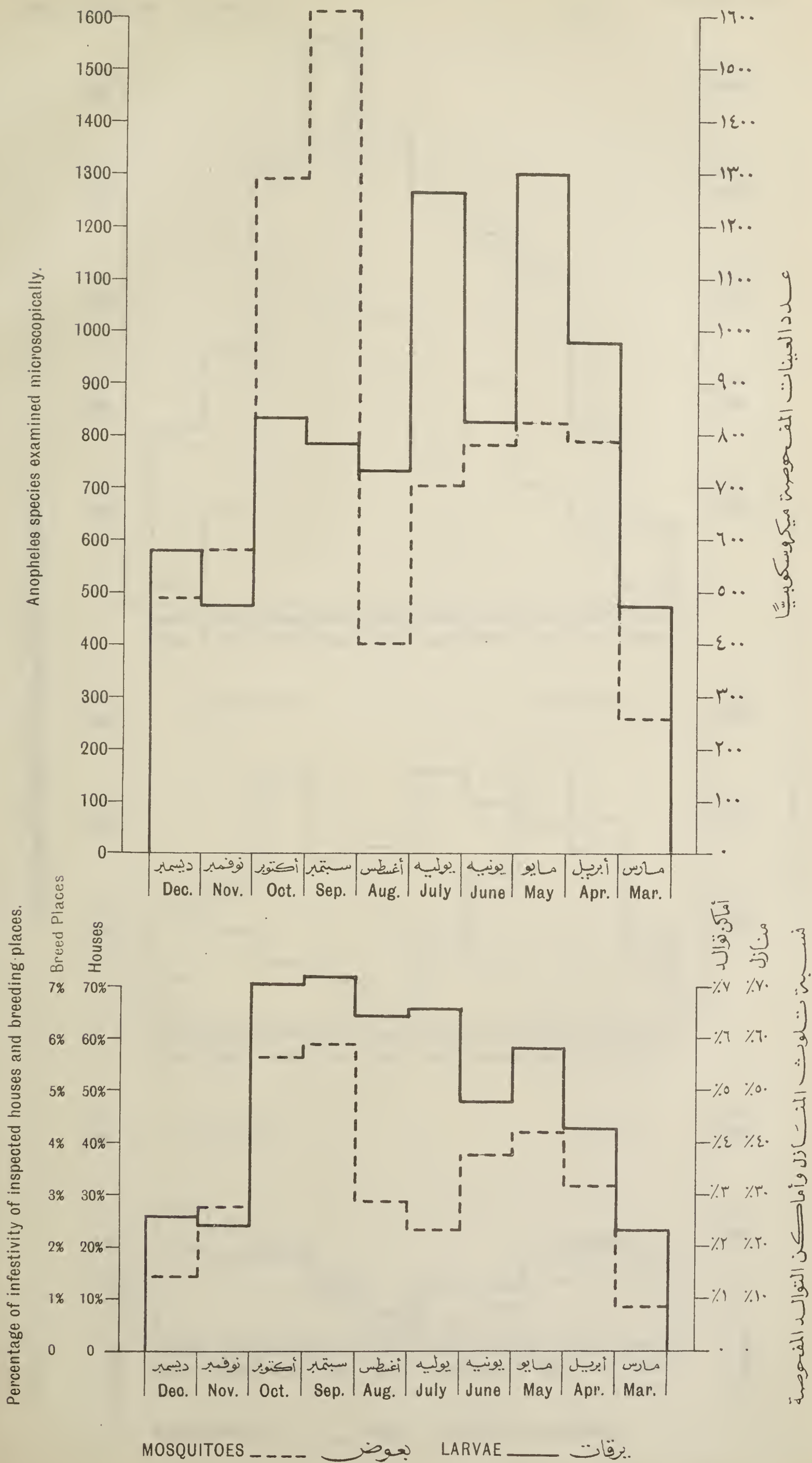


توزيع الأنوفيل الثلاثة بمديرية الفيوم

DISTRIBUTION OF ANOPHELES SPECIES PREVAILING IN FAIYUM PROVINCE



MONTHLY DISTRIBUTION OF ANOPHELES IN FAIYUM PROVINCE

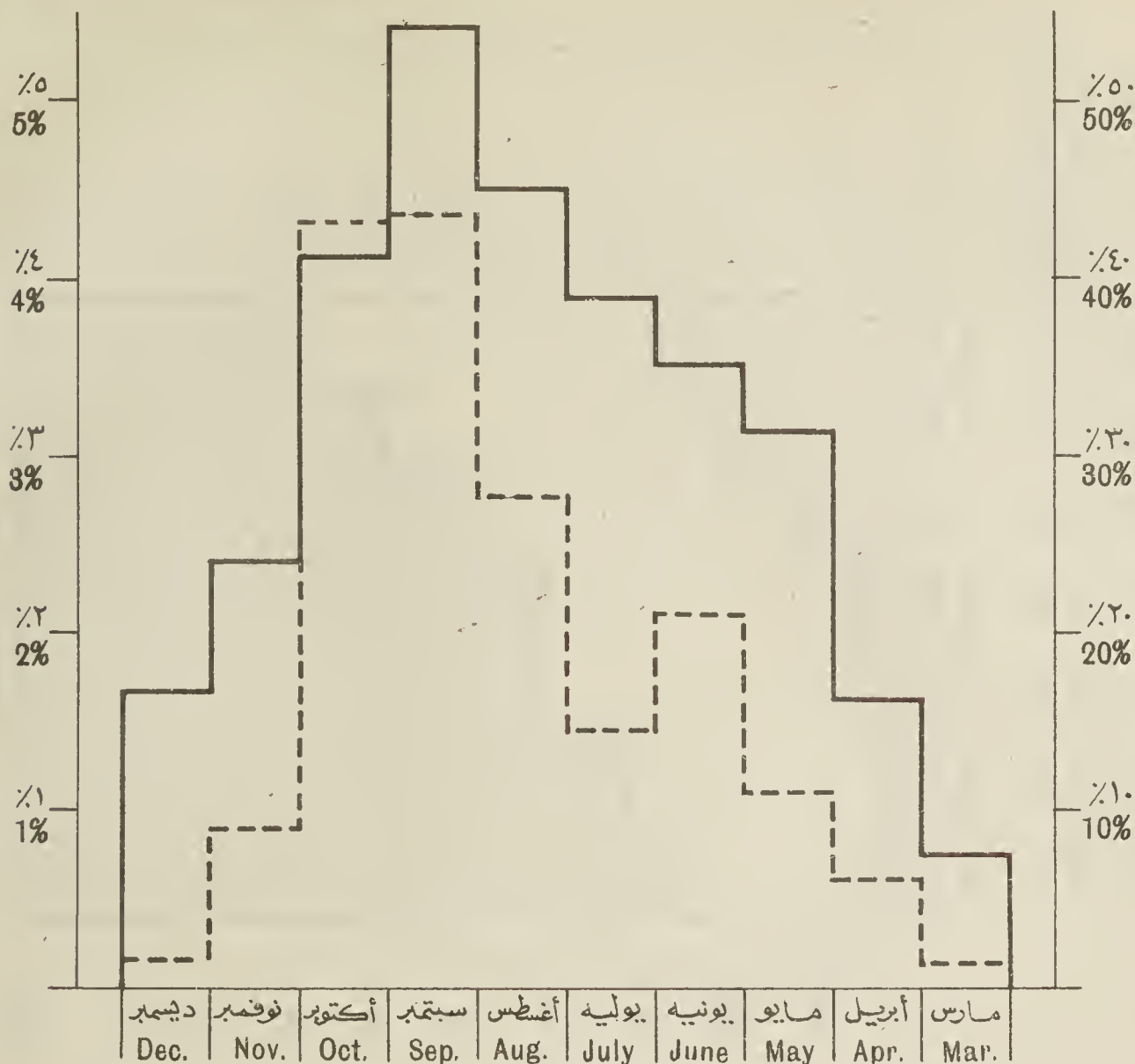


DISTRIBUTION OF ANOPHELES SPECIES PREVAILING IN FAIYUM PROVINCE

Perc. of Infestivity *A. pharoensis*

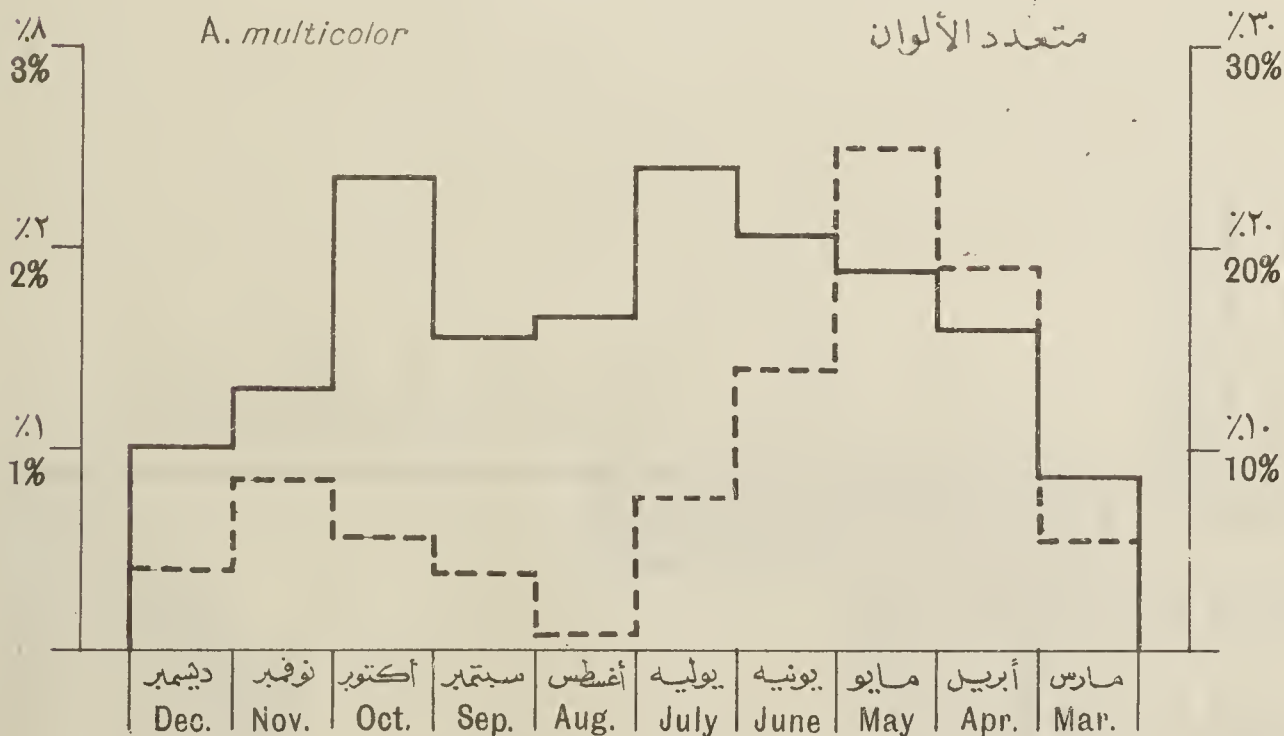
نسبة التلوث فرعونى

Percentage of infestivity of houses and breeding places.



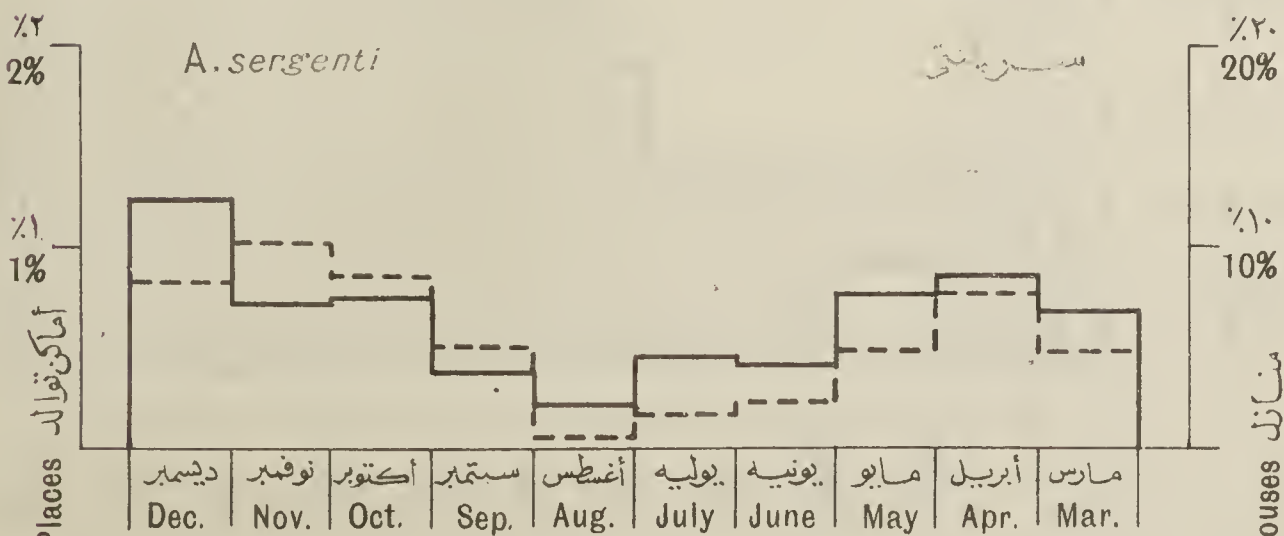
A. multicolor

متعدد الألوان



A. sergenti

سيرجنتى



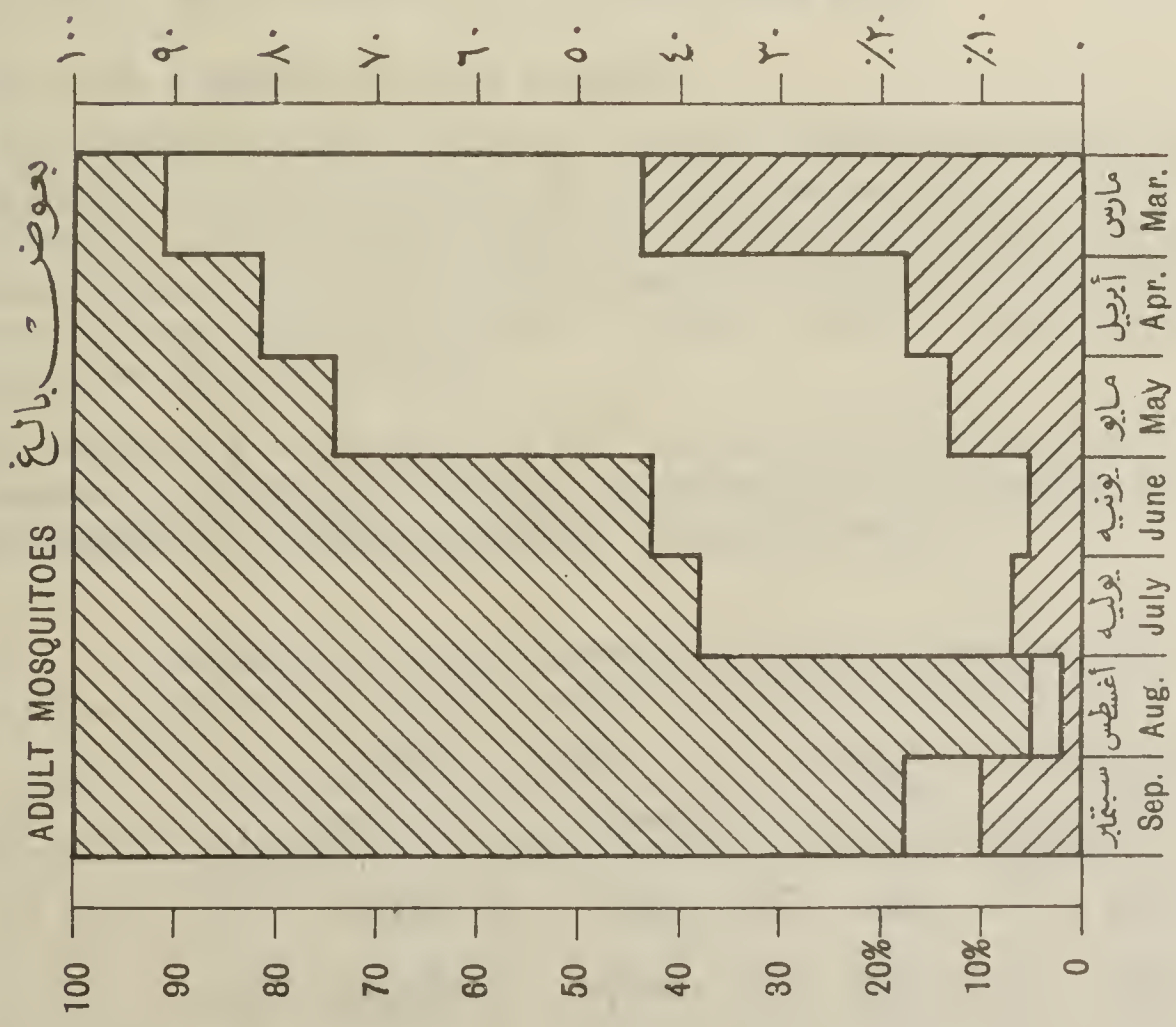
Breed Places

Houses

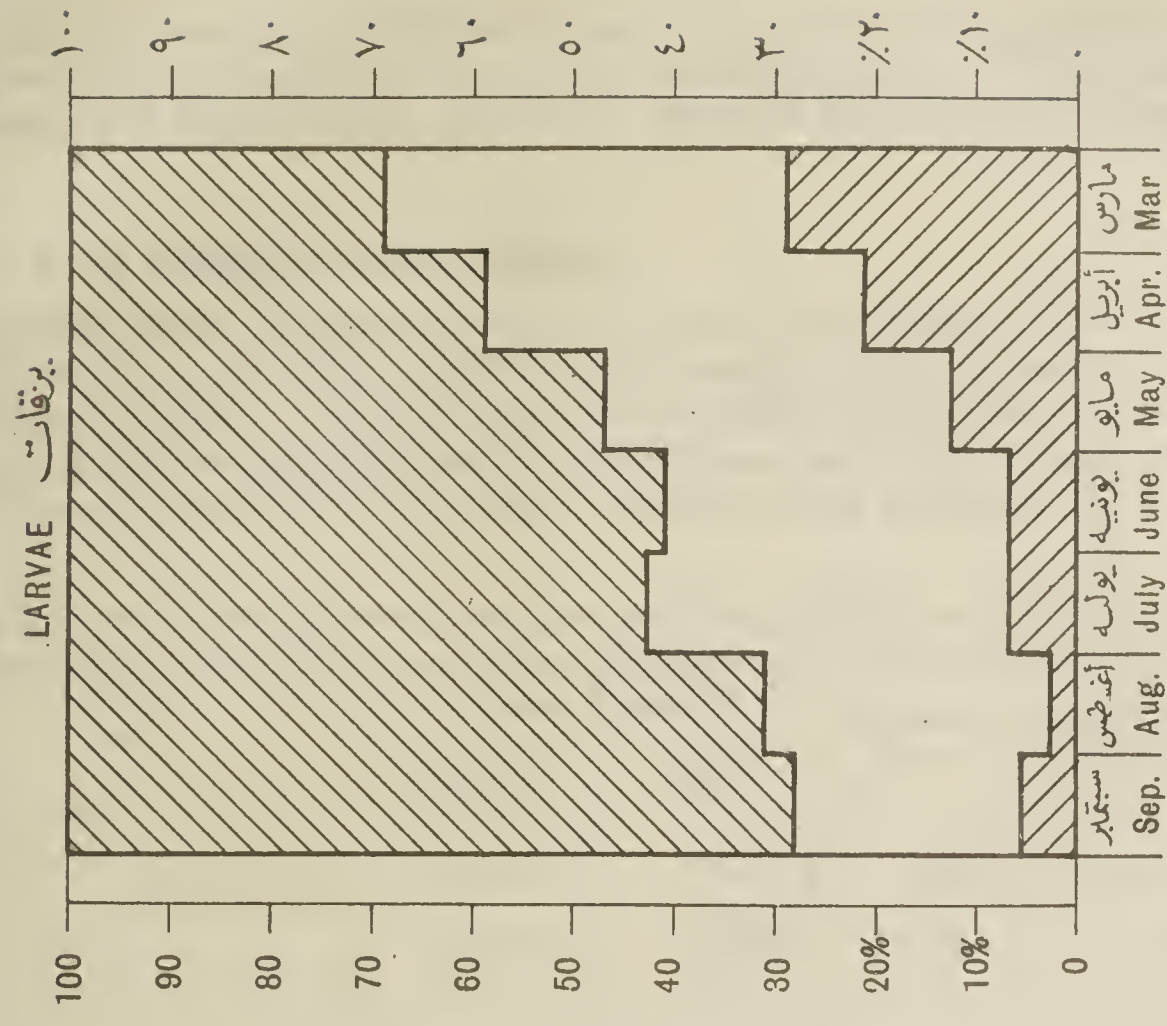
MOSQUITOES ----- بعوض LARVAE ————— يرقات

التوزيع المئوي للأنوفيل في مديريّة الفيوم (عن المدة من مارس إلى سبتمبر ١٩٤٦م)

PERCENTAGE OF MONTHLY DISTRIBUTION OF PREVAILING SPECIES OF ANOPH. IN FAIYUM PROV: (FROM MARS TO SEPT. 1946)



فروعوني	٩%
A. pharoensis	9%
متعدد	٤٧%
A. multicolor	47%
سرجنتي	٤٤%
A. sergenti	44%



فروعوني	٣١%
A. pharoensis	31%
متعدد	٤٠,٥%
A. multicolor	40.5%
سرجنتي	٢٨,٥%
A. sergenti	28.5%

Chapter XVII.—BILHARZIA SNAIL DESTRUCTION

Introduction.

During the year 1945-1946 the Section has improved the organization and obtained better control in the Provinces it has so far taken over, that is in Fayoum, Giza and Aswan Provinces and in Dakhla oasis. It has also extended its activities to Kharga and Baharia oases.

Progress of the Campaign in the Fayoum.

The work in the Province is well in hand and the number of units of work has been reduced from 51 to 46, which reduction is expected to continue as the infested lengths in the Province decrease. A small laboratory was established for the systematic examination of *Bulinus* snails for schistosomiasis and immediate and intensive treatment was given to foci of bilharzial infection. The success of the year's work is given in the following table :—

TABLE No. 104.—COMPARISON OF THE MAIN SURVEYS OF 1945 AND 1946 IN FAYOUM PROVINCE

Year	Number of streams		Comparative Ratio	Length infested in Kms.	No. of <i>Bulinus</i> in 100 dips
	Surveyed	Infested			
1945	139,721	5,707	4%	4,366	20
1946	141,744	2,785	2%	2,621	12
Differences : increase or decrease	+ 2,023	— 2,922	— 2%	— 1,745	— 8

The use of Palm-leaves in Snail Control.—The use of palm-leaves as traps for surveying canals only lightly infested with snails has already been reported. This year a system of large scale snail removal by means of palm-leaves has been devised and applied wherever we experienced difficulties in water control. About 192,000 *Bulinus* snails were removed from 28 main canals between July and December 1945.

Progress of the Campaign in Giza Province.

A reorganization makes it possible not only to cover canals twice yearly, but allows for several check surveys and treatments, between the two main surveys, and for the treatment of drains. Several ponds acting as reservoirs for breeding snails were filled in. During the winter closure most of the infested streams were cleared, and then sulphated soon after the return of water with good results. Like last year only canals containing more than 10 snails in 100 dips were treated.

The results of 3 year's work in the canals of the Province is given in table No. 105 which shows the extension of surveys, the reduction of the number of streams infested and the decrease in the snail population of infested canals.

TABLE No. 105.—MAIN SURVEYS OF CANALS IN GIZA PROVINCE

Year	Number of Canals		Comparative Ratio	Lengths infested in Kms.	No. of <i>Bulinus</i> in 100 dips.
	Surveyed	Infested			
1943	4,111	1,616	39%	1,743	63
1944	10,934	2,040	19%	1,455	42
1945	12,978	2,010	15%	1,626	27
1946	14,756	1,811	12%	1,533	26

From 1,834 drains surveyed, 412 or 22 per cent were found infested at the rate of 46 *Bulinus* in 100 dips. The figures for these drains, which were hardly considered in previous years, clearly demonstrate, when compared with those for canals, the effect of control measures.

Progress of the Campaign in Aswan Province.

In spite of great difficulties of organization as well as of labour and of co-ordination with the agricultural and irrigation necessities of this Province, it has been possible to achieve a marked reduction of the snail population. Table No. 106 compares the first survey of the Province before treatment with the survey made after the treatment of the canals of Kom Ombo area proper and all areas in Edfu district. Drains, though surveyed, have not been treated, while about 6,000 distributaries in Edfu areas, which dry up between irrigation rotations and do harbour few snails, have been omitted in the second survey.

TABLE No. 106.—SURVEYS OF STREAMS IN ASWAN PROVINCE

Year	Number of streams		Lengths infested in Kms.	Number of <i>Bulinus</i> in 100 Dips
	Surveyed	Infested		
1945	8,702	514	593	235
1946	2,016	597	622	96

Campaign in the Oases.

1) Progress in Dakhla Oasis (Population 20,000).

The streams of the oasis were re-surveyed and re-treated village by village, and post treatment surveys show that the intensity of snail infestation in most wells has been reduced satisfactorily. From 77 wells originally infested with *Bulinus*, the snails carrying bilharziasis, *Limnaea cailliaudi* the snails carrying liver fluke of cattle, or both, 31 wells are now negative for snails, but 11 new infestations were noted which had escaped attention before

2) Extension to Kharga Oasis (Population 10,000).

Having ascertained that both human schistosomiasis and fascioliasis of cattle are present in this oasis, a survey was made for the snail vectors of these diseases. From 305 wells examined only 29 harboured significant snails and of these only 4 contained *Bulinus*. A first treatment halved the number of infested wells. The remaining wells were given special care and the wells are being watched for any reappearance of snails.

3) Extension to Baharia Oasis (Population 5,700).

This oasis, which is known to be heavily infested with schistosomiasis as well as fascioliasis was surveyed for the molluscs responsible for the transmission of these diseases. Out of 312 wells surveyed, 222 were infested. The infestation is usually very heavy but concentrated in the reservoirs where the irrigation water collects. The fact that the wells and reservoirs are of limited capacity makes it easy to control with the least possible effort. The oasis is now under treatment.

Laboratory Work and Research.

As in previous years the laboratory has been taking care of routine examinations of snails for schistosome infections in Giza Province, in view of immediate application of the results to field work.

Detailed reports on biological studies carried over several years are being prepared on various subjects : (1) on self-fertilized *Planorbis boissyi* and *Bulinus truncatus* ; (2) on some South African snail vectors of schistosomiasis ; (3) on the value of palm-leaf traps in the survey and treatment of streams infested with *Bulinus* snails.

Experiments on the following subjects were carried during 1945 :—

(1) *The power of penetration of S. haematobium cercariae*.—From the autopsy of experimental animals : (a) mature schistosomes of both sexes were recovered from animals exposed to cercariae up to 24 hours old ; (b) those exposed to cercariae 30 hours old gave male worms only, and (c) those exposed to older cercariae gave none.

(2) *The effect of Chemicals on Bulinus snails and aquatic weeds*.—The action of a new weed killer "Methoxone", of lime, bleaching powder, caustic potash and D.D.T. was investigated in various concentrations, but none offered any advantage, with regard to cost or efficacy, over our present drugs and methods.

Chapter VIII. - GAMBIAE

The last phase of the A. gambiae Campaign.

The complete Eradication of A. gambiae.—The last findings of *A. gambia* in Egypt were the larva found on February 5, 1945, at "Darak" (zone) No. 92 in Kom Ombo District and the imago caught on February 19, 1945 at "Darak" (zone) No. 89 also in Kom Ombo District.

Since then, comprehensive periodical dusting was vigorously maintained during the following six months. On August 30, 1945, all control measures were stopped and at the same time survey work was intensified throughout the once infested areas. The survey results obtained during the following three months were always negative despite the fact that this period was the most favourable season for *A. gambia* breeding in Egypt. Eradication was thereupon considered complete and the Gambiae Campaign closed as from November 29, 1945. Chart No. 1 illustrates the results of Anopheline collections and their identifications on which this conclusion was based.

Why a Sentinel Service was set up. The *A. gambiae* eradication campaign in Egypt was the second of its kind in history. The first was launched in Brazil between 1930–1940. There is, however, a vast difference between the situation in both countries. Brazil is entirely separated from the mosquito endemic areas in Africa, but Egypt is a part of Africa and, through the River Nile, is in direct contact with the source of infection. Since sentinel service was set up and maintained for one year following the eradication of the mosquito in Brazil and since mosquito eradication in Egypt was the first of its kind within the Continent of Africa, it was decided to set up and maintain for another year a similar service for mosquito survey and to continue all previous measures guarding against a second escape of the mosquito from the south.

Exchange of information with the Sudan Government.—Having ensured the country's freedom from the mosquito and in order to safeguard against a second surprise invasion, the Sudan Medical Service was approached with a view to exchanging information regarding mosquito survey activities in each territory.

Organization of Sentinel Service.

Geographical Organization.—The geographical divisions of the eradication campaign remained only nominally for purposes of comparison with statistical data of previous survey work. Actually of the 40 posts comprising the 641 zones, four posts only were retained at Aswan, Kom Ombo, Luxor and Assiut.

An out-post in connection with Aswan was set up at Bellana under a resident supervisor.

Table No. 107 shows the four posts, the zones nominally depending on each, and the periodical survey intervals.

In determining the distribution of these posts and their geographical circumscription, consideration was given to abundance and continuance of water in the place or otherwise and whether previously infested with *gambia* or not. It is worthy of mention that the general principle of survey was carrying it out once every four weeks. In important localities, survey was done once a fortnight *e.g.* Daraw. In places of special importance, this was done weekly on the same lines as eradication survey.

Weekly survey was therefore done in Bellana, the southern entrance, in Aswan being the first dam southwards and in Kom Ombo being the first perennial irrigation area in the south. In other words, the first most favourable *A. gambiae* breeding places on its way northwards were placed under constant survey.

Administrative Organization.

Since the object of the survey was to detect the presence or otherwise of the mosquito, no control work of any kind was to be exercised except in so far as concerns mosquito disinfection in means of transport between the Sudan and Egypt. Three posts were set up for this purpose, one at Bellana and two on both banks of the Nile South of the Dam.

Two survey gangs, each consisting of 6 larvae surveyors and two imago surveyors under a supervisor, were assigned to each of the four posts. Survey work was limited to the once infested area, *i.e.*, from Bellana South to Assiut town in the North. No survey work was done in Abnoub and Manfalout Districts of Assiut Province nor in the whole of Minia Province which were under survey during the eradication campaign.

Of the eradication campaign units, only the field headquarters at Assiut and the field Laboratory were retained, with the four posts directly annexed to the former. The field Laboratory examined all material collected by the survey gangs, tabulated and notified the results to the posts and Central Administration in Cairo.

The daily, weekly and monthly returns were continued.

The survey and disinfestation gangs recorded their daily and weekly activities and sent the information to their respective posts which after recording in their books, forwarded copies thereof to the field headquarters at Assiut. This in turn verified and forwarded to Central Administration in Cairo where the reports were compiled.

All articles of equipment were supplied by the Central Administration. A small workshop was maintained in the field headquarters for motor repairs, and a mechanic was attached to Kom Ombo post for emergencies.

Survey Operations.

Gambia mosquito survey involved two distinct operations: Larvae survey and imago survey. Each of these operations was conducted quite independently of the other whether as regards personnel or site of operations. Thus both operations acted as a control to one another.

Larvae Survey.

Table No. 108 gives the number of units surveyed monthly for larvae and the number of those returned positive for Anopheline larvae. A unit is five metres run or square. Wells and Sakies are each considered a unit irrespective of its area. Chart No. 3 shows the total number of units surveyed weekly and the positive ratio per thousand.

A total of 1,284,110 units were surveyed during the year of which 12,263 or 9.5 per thousand were positive for Anopheline Larvae. This gives an average of 25, 178.6 units surveyed weekly.

Imago Survey.

Table No. 108 gives the number of houses surveyed monthly for the adult mosquito and the number returned positive for Anopheline mosquito. Chart No. 4 gives the number of houses surveyed weekly and the positive ratio per thousand.

This shows that of a total of 143,982 houses surveyed during the year, 4,406 or 30.9 per thousand were found positive, *i.e.* an average of 2,823 houses surveyed weekly.

Laboratory Identifications.

During 1946, the laboratory at Assiut received and examined a total of 9,017 collections of Anopheline Larvae. These included the following species: 68,657 *pharoensis*, 9,443 *multicolor*, 112 *coustani*, 538 *d'thali* and 536 *Pubae*.

A total of 4,645 adult *A. mosquito* collections were received and examined by the laboratory during the year. These collections included 7,345 *A. pharoensis* and 5,517 *A. multicolor*.

Confirmation of the Eradication of the Gambiae Mosquito.

Despite the extensive survey referred to above and the numbers of collections of specimens from every place throughout the year, not one adult mosquito or larvae of *A. gambiae* was detected. Moreover other evidences were available which confirmed the complete eradication of the species from previously infested areas.

Thus, for instance, the 1946 Nile flood was abnormally high causing the formation of surface water collections all over the area, which, being most favourable mosquito breeding places, helped the spread of mosquitoes everywhere. Had *A. gambiae* been present, it would have undoubtedly spread likewise.

Secondly, despite the spread of the other species of Anopheles, the incidence of malaria in the once infested areas was quite normal. The following are the official figures published by the statistical office.

MALARIA INCIDENCE IN THE FOUR SOUTHERN PROVINCES DURING 1946

Province.	New Cases	Relapses.
Assiut	2	199
Girga	25	382
Qena	6	684
Aswan	26	989
TOTAL	59	2,254

Again the Malaria Section personnel used to collect material independently of the Sentinel Service. These collections were examined either in their own laboratory, in the Fouad Ist Research Institute for Tropical Diseases or in the Government Laboratory at Luxor. In none of these collections had *A. gambiae* been discovered.

It also happened in September, following the abnormal Nile flood and the subsequent spread of mosquitoes, that the Kom Ombo Sugar Factory complained to the Ministry of the reappearance of the gambia mosquito within the area. A special gang of surveyors under the first inspector of the Gambia Eradication Section was delegated to Kom Ombo to carry out an additional comprehensive survey of all the district. Part of the material collected was sent to Fouad Ist Research Institute for Tropical Diseases, the other part was forwarded as usual to the field laboratory at Assiut. Examination disclosed that these samples contained 2191 Larvae of the *A. pharoensis*, 287 larvae of *A. multicolor*, 236 mosquitoes of the *A. pharoensis* and 209 of *A. multicolor*. Not one mosquito or larva of the *A. gambiae* was found.

Study of the Spread of the Endemic Anopheline Species.

Now that these surveys have been conducted for a whole year and with an even staff throughout the year, it is desirable that the results be studied with a view to determining the extent of the spread of each of the endemic Anopheline species within the four southern provinces which constituted the field of operation.

Charts 3 and 4 give a general view of the spread of the endemic species of anopheles in this part of the country despite its length and variation of environment. They show that the major outburst occurred during the 37 to 45 weeks or from about mid September to mid November, with the peak occurring in the 41st week or about mid October. The down curve occurred during the 1 to 4 and 28 to 35 weeks or during January and from July to September. The lowest level for larvae was during the first week and for the adult mosquito during the third week, i.e. during the first part of January.

Charts 5 and 6 give the relative distribution of the endemic species of anophelinae according to the material collected during 1946 surveys, and microscopically identified at Assiut field laboratory.

It is to be pointed out that these collections were taken as a basis for calculation irrespective of the number of larvae or adult mosquitoes contained, since each one was collected from a separate breeding place. For eradication purposes, it is the number of breeding places that counts and not the number of larvae or mosquitoes contained therein. These, however, are equally important if not more important from the epidemiological point of view.

It was the practice to place all larvae collected from any one survey unit in one tube and labelled as one collection irrespective of the number of larvae therein. Again all mosquitoes collected from any one room were placed in one box and labelled as one collection.

The charts indicate that the *A. pharoensis* is the predominant species of anopheles in all parts of the four provinces and is present throughout the year. It is more prevalent during October and least prevalent during February and March, and that the larvae is more resistant to seasonal climatic changes than the adult. Chart 5 shows that this species of anopheline predominates as one proceeds northwards.

A. multicolor is prevalent in Aswan Province only and is very scarce in the northern provinces. The extent of its spread during the seasons of the year cannot be accurately determined since *A. pharoensis* predominates and overshadows the others, within habitation and because no outdoor captures were conducted by the Service.

So very few *A. coustani* and *d'thali* were encountered and at long intervals that they were considered insignificant

Disinfestation of Means of Transport.

As stated earlier, disinfestation was limited to river craft arriving from the Sudan or bound northwards through Aswan Dam.

The object was to prevent another escape of *A. gambiae* from its habitat in the Sudan.

Two methods of disinfestation were used. The one was of an immediate but momentary effect; the other was of a slow but prolonged action.

Immediate Disinsectization.

A 0.15 per cent pyrethrum kerosene solution was used. This was prepared on the spot from a 2.5 per cent pyrethrum extract and ordinary kerosene.

This solution was used at Bellana and Aswan water-lock only for spraying all north bound rivercraft. In view of the abnormal Nile food this year and as a further precautionary measure, rivercraft which came to anchor south of Aswan Dam and then returned southward without crossing the water lock were also sprayed.

There were two sites for loading of rivercraft, the one on the east bank of the Nile and the other on the west bank. Disinfestation work began in the former in mid August, i.e. the 33rd week and in the latter on September, 1st or the 35th week.

The following gives the number of rivercraft disinfested in each of the four Disinfestation posts and the amount of Pyrethrum solution used.

Post	No. of Rivercraft	Insecticide Consumed in Litres
Bellana	748	48
Dam Water Lock... ..	1,424	69
Shellal E.	863	22
Shellal W.	194	7
TOTAL	3,219	146

Prolonged Disinfestation.

A 5 per cent D.D.T. kerosene solution was used in spray painting motor driven rivercraft with internal combustion and 1 per cent D.D.T. water emulsion and Tybol for painting sailing boats. The use of the emulsion was due to the fact that kerosene vapour collected in a concentrated strength in the closed births of sailing boats and was liable to explosion.

D.D.T. spray painting was done on the east bank of the Nile to the south of Aswan Dam at the anchorage of the Sudan Government boats. A petrol driven compressor was used. The spray painting with the D.D.T. emulsion was done on the west bank south of the Aswan Dam water lock and a stirrup pump was used.

In both cases, repainting was done once every three months. The following are details of rivercraft spray painted during 1946 and quantities of insecticides used.

Solution	Number of River Craft	Quantity used in Litres
5% D.D.T. Solution	81	1,538
1% D.D.T. Emulsion	464	1,632

Stock of Insecticides.

Sufficient quantities of Paris Green were stocked in the posts and field headquarters at Assiut for emergencies should *A. gambiae* mosquito reappear, but the control year elapsed without any need arising for their use.

Besides Paris Green, insecticide solutions were used for mosquito control in means of transport as stated earlier, *i.e.* 0.15 per cent Pyrethrum solution, 5 per cent D.D.T. solution and 1 per cent D.D.T. emulsion. A 0.07 per cent Pyrethrum kerosene solution was also used in survey work as a knock down for the adult mosquito. As in other solutions, this last was also prepared on the spot from commercial kerosene and 2.5 per cent Pyrethrum extract. A total of 8,520 litres of this solution was used.

Transport.

On liquidation of the eradication campaign, 12 of the vehicles in use (7 lorries and 5 pick-ups) were left for the subsequent sentinel work. These were distributed as follows:—

	Lorries	Pick ups		Lorries	Pick ups
Aswan	—	2	Assiut	2	1
Kom Ombo	2	1	F. Headquarters ...	1	—
Luxor	2	1			

In addition to these vehicles, the Nile steamer "Koresko" was used for periodical survey work in Nubia. It used to proceed once every month carrying the surveyors and the chief of Aswan post or his deputy and survey all the Zones in Nubia and inspect Bellana post. The journey usually took 10-12 days.

Liquidation.

All field work was stopped on December 26, 1946. Liquidation of the office and release of daily-paid personnel were done during the remaining days of the year.

A committee presided over by the Under-Secretary of State and attended by Heads of Departments and Sections connected with the *gambiae* campaign met on December 24, 1946, to dispose of the equipment and personnel.

Thus all anti *A. gambiae* measures were terminated in Egypt except one, namely, the adult mosquito control measures in rivercraft travelling between the Sudan and Aswan dam.

Aswan post with its disinfestation personnel as well as Bellana outpost were annexed to the Malaria Control Section for supervision. Exchange of returns on malaria and mosquito in respect of Nubia and Wadi Halfa were also continued between the Sudan Medical Services and that Section.

SUMMARY

(1) Following the termination of *A. gambiae* eradication campaign on November 29, 1945, a Sentinel Service was established for one year.

Survey work was started on January 1, 1946, and terminated in the field on December 26, 1946. The Survey Service was liquidated on December 31, 1946.

(2) This ended all measures that were taken in Egypt against *A. gambiae*, except the disinfestation of rivercraft between the Sudan boundaries and Aswan Dam which will be continued until all possibilities of reinvasion of Egypt by the mosquito from its habitat in the Sudan are removed.

(3) Survey work was undertaken by the posts at Aswan, Kom Ombo, Luxor and Assiut with field headquarters at Assiut. An outpost in connection with Aswan post was set up at Bellana as well as two river craft disinfestation stations on both banks of the Nile South of Aswan Dam. To the field headquarters, was attached the base depot, the laboratory and a small motor repair workshop.

(4) The strength of the Survey Service varied between 156 and 187 men each month. These included three medical officers, three engineers, twelve motor car drivers, fourteen clerical staff and the rest were field workers.

(5) Twelve vehicles and a Nile steamer were employed by the service.

(6) Work was limited to mosquito survey between Bellana in the South and Assiut in the North, and disinfestation of river craft at Bellana and South of Aswan Dam.

(7) Of a total of 1,284,110 units searched for larvae, 12,263 were positive for anophelinae and of 143,982 houses surveyed, 4,406 harboured adult anopheline mosquitoes.

(8) A total of 3,219 river craft were disinfested and 545 Nile Steamers were spray painted with D.D.T.

(9) Insecticides used were 8,520 litres of 0.07 per cent pyrethrum solution, 146 litres of 0.15 per cent pyrethrum solution, 1,538 litres of 5 per cent D D.T. solution and 1,632 litres of 1 per cent D.D.T. emulsion.

(10) The total expenditures of the Sentinel Service were L.E. 47,340.789. Mills

(11) The field laboratory received 9,017 larvae collections which contained 68,657 *A. Pharoensis*, 9,443 *A. multicolor*, 112 *A. custani* and 238 *A. D'thali* and 536 *Pubae*

Of a total of 4,645 collections of adult mosquitoes received by the laboratory 7,345 were *A. pharoensis* and 5,517 were *A. multicolor*.

Thus in this vast number of larvae and mosquito species examined there was not a single *A. gambiae* despite the abnormal 1946 high Nile flood which favoured the spread of all species of mosquitoes.

TABLE No. 107.—GEOGRAPHICAL DISTRIBUTION OF THE FOUR POSTS OF THE SENTINEL SERVICE

Post	Posts	Z o n e s			Periodical Survey intervals
		From	to	Total	
Aswan	Ballana	1	4	4	Weekly
	Enciba	5	12	8	
	El Dirr	13	20	8	Monthly
	Allaqi	21	31	11	
	Khor Bahma ...	32	45	14	
	Aswan	46	52	17	Weekly
	TOTAL			62	
Kom Ombo ...	Daraw... ..	63	66	4	Every fortnight
	Binban	57	71	5	
	Kom' Ombo ...	72	101	31	Weekly
	Silwa	103	107	5	
	Sirag	108	112	5	Monthly
	Atwani	113	120	8	
	Idfu	121	136	16	
	Bisaliya	137	143	7	
	Sibaiya	144	150	7	
	TOTAL			88	
Luxor	Isna	151	162	12	Monthly
	Mataana	163	176	14	
	Armant	177	190	14	
	Dabiya	191	195	5	
	Qurna	196	200	5	
	El Deir	201	210	10	
	Adissat	211	218	8	Every fortnight
	Luxor	219	238	20	
	Qus	239	256	18	
	Qena	257	280	24	
	El Ballas	281	296	16	Monthly
	Dishna	297	323	27	
	TOTAL			173	
Assiut	Hiw	324	341	18	Monthly
	Nag Hamadi ...	342	363	22	
	Khiyam	364	389	26	
	Abu Shusha ...	390	408	19	
	Baliana	409	429	21	
	Girga	430	458	39	
	Akhmim	469	488	20	
	Suhag	489	524	36	
	Tahta	525	541	17	
	Tima	542	559	27	
		581	588		
		592	580	22	
	Badari	560			
		633			
		589	591		
	Abu Tig	592	609	23	
		611	613		
		610			
	Assiut	614	632	28	
		624	641		
	TOTAL			318	

TABLE NO. 108.—MONTHLY ADULT AND LARVAL SURVEYS COMPLETED BY THE SENTINEL SERVICE
DURING 1946

Month	No. of week	Larvae Survey		Imago Survey	
		Units Surveyed	Units Positive for anopheles	Houses Surveyed	Houses Positive for anopheles
January	4	83,650	196	7,446	45
February	4	102,329	322	9,569	131
March	4	116,454	481	11,835	273
April	5	136,907	1,353	14,588	333
May	4	106,230	1,179	10,706	291
June	4	111,145	807	12,877	185
July	5	129,908	1,080	16,593	179
August	4	93,407	520	11,693	56
September	5	141,801	2,168	16,230	807
October	4	120,865	3,276	13,585	1,573
November	4	76,215	685	9,419	327
December	4	65,199	196	9,642	205
TOTAL	51	1,284,110	12,263	143,922	4,406

TABLE No. 109.—LARVAL AND ADULT IDENTIFICATIONS OF ALL COLLECTIONS RECEIVED BY THE LABORATORY OF THE SENTINEL SERVICE AT ASSIUT
DURING 1946 (DISTRIBUTED MONTHLY ACCORDING TO SPECIES)

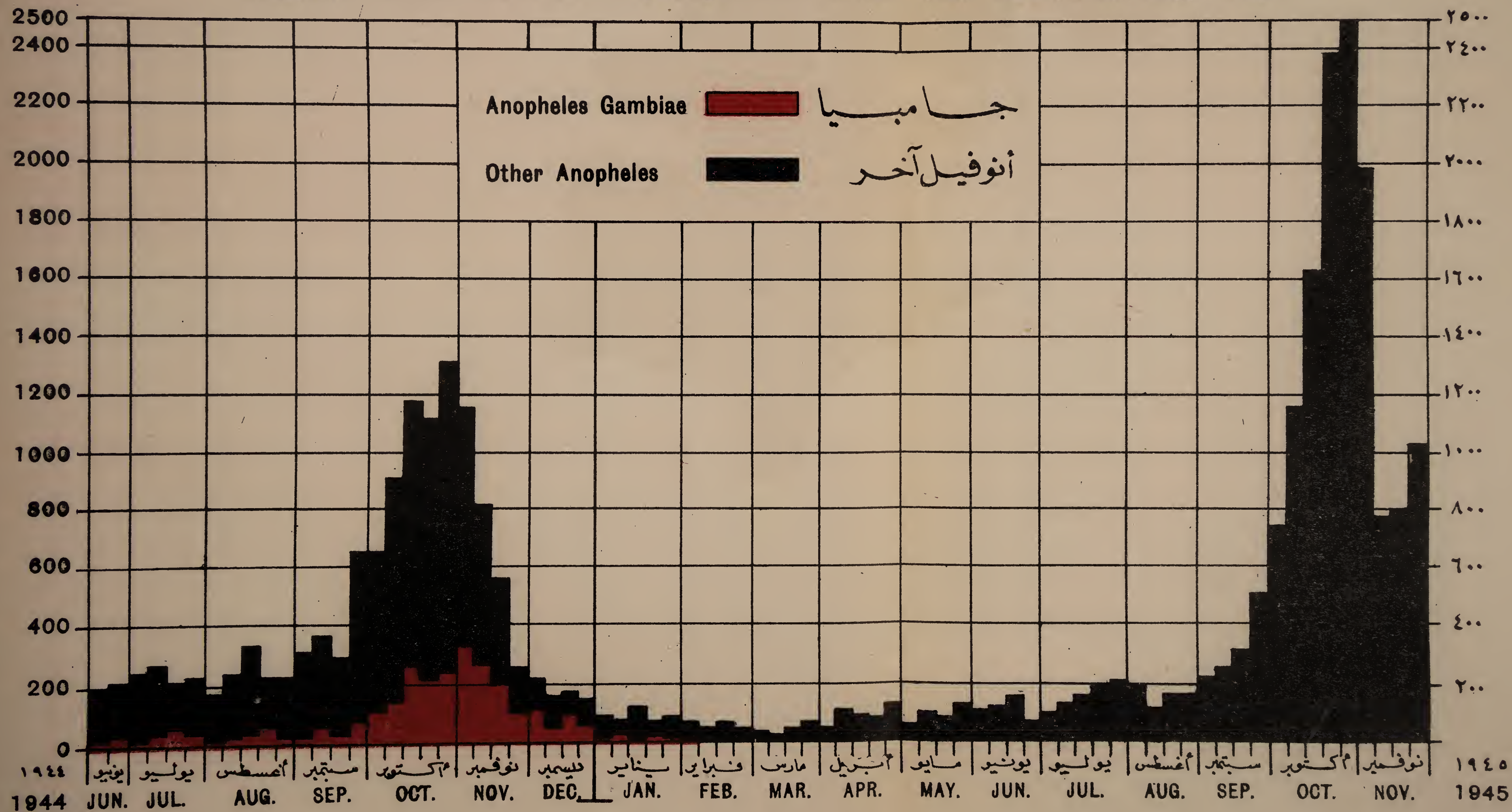
Month and Place	Larvae						Adults							
	Collections	Pharoensis	%	Multicolor	%	Coustani	%	D'thali	%	Collection	Pharoensis	%	Multicolor	%
January ...	199	114	57.29	72	36.18	13	6.53	—	—	45	5	11.11	40	88.89
February ...	274	147	53.65	124	45.25	3	1.09	—	—	133	4	3.01	129	96.99
March ...	363	196	53.99	164	45.16	—	—	3	1.83	263	8	2.44	255	97.56
April ...	877	655	74.69	203	23.15	7	0.80	12	1.37	351	147	41.88	204	58.12
May ...	889	751	84.48	138	15.52	—	—	—	—	222	104	36.88	178	63.12
June ...	628	505	80.41	120	19.11	1	0.16	2	0.32	234	54	23.88	180	76.92
July ...	659	557	84.52	100	15.17	—	—	2	0.30	180	83	46.11	97	53.89
August ...	303	238	78.55	61	20.13	4	1.32	—	—	57	31	54.39	26	45.61
September ...	1,644	1,526	92.76	96	5.84	2	0.12	21	1.28	849	609	71.72	240	28.26
October ...	2,443	2,315	94.80	123	5.03	3	0.12	1	0.04	1,675	13,77	82.21	298	17.79
November ...	575	538	93.56	37	6.43	—	—	—	—	355	186	52.39	169	47.61
December ...	163	129	79.14	34	20.86	—	—	—	—	221	80	36.20	141	63.80
Ballana ...	569	267	46.92	261	45.87	—	—	41	7.21	418	107	25.59	511	74.40
El Nuba ...	23	19	82.61	2	17.39	—	—	—	—	2	—	—	2	100.00
Aswan ...	326	237	72.70	89	27.30	—	—	—	—	26	17	65.38	9	34.62
Daraw ...	330	252	76.36	78	23.64	—	—	—	—	182	43	26.63	139	76.27
Kom Ombo ...	2,114	1,447	68.45	638	30.18	29	1.27	—	—	1,999	627	31.37	1,372	68.63
Idfu ...	748	555	74.20	193	25.80	—	—	—	—	367	248	67.57	119	32.43
Armant ...	907	903	99.56	4	0.44	—	—	—	—	207	206	99.51	1	0.49
Luxor ...	332	332	100.00	—	—	—	—	—	—	98	98	100.00	—	—
Qena ...	677	675	99.71	2	0.29	—	—	—	—	509	509	100.00	—	—
Assiut ...	2,991	2,984	99.80	5	0.10	4	0.10	—	—	837	833	99.52	4	0.48
TOTAL ...	9,017	7,671	85.87	1,272	14.11	33	0.47	41	0.45	4,645	2,688	57.87	1,957	42.13

Chart 1

لوحة رقم ١

عدد عينات يرقات الأنوفيل بأنواعه التي شحصت مجرّياً بالمعمل

NUMBER OF COLLECTIONS OF ANOPHELES LARVAE IDENTIFIED MICROSCOPICALLY AT THE GAMBIAE ERADICATION SERVICE LABORATORY BY WEEKS. JUNE 1944 TO NOVEMBER 1945



UPPER EGYPT الوجه القبلي

Scale 1:1,000,000

مقياس الرسم ١:١٠٠٠٠٠٠

Mantikah or Division

منطقة

Dairah or Post

دائرة

Boundaries of Mantikah

حدود المناطق





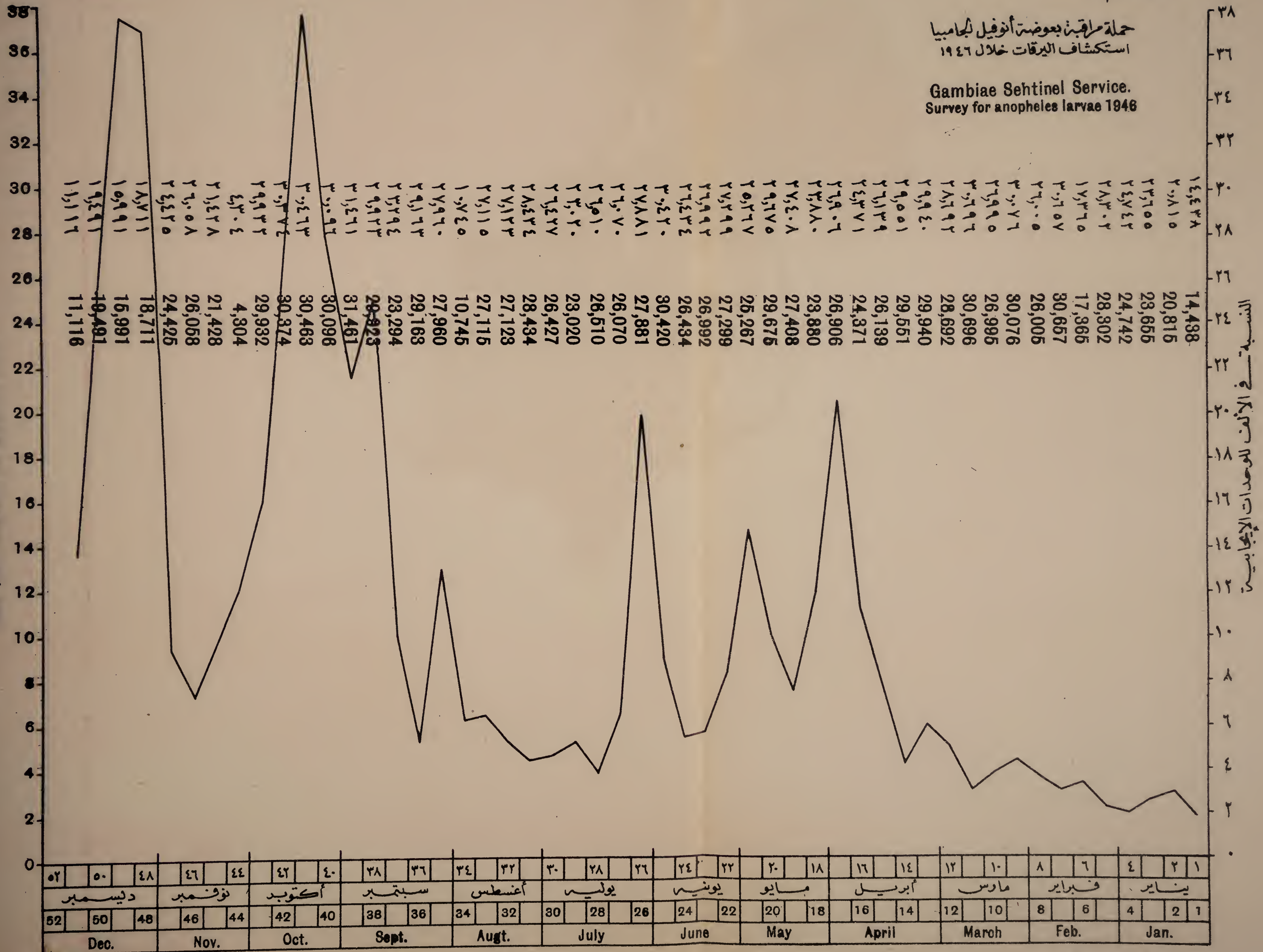
Chart 3

لوحة رقم ٣

حملة مراقبة بعوضيات أنوفيل الجامبيا
استكشاف اليرقات خلال ١٩٤٦

Gambiae Sehtinel Service.
Survey for anopheles larvae 1946

Rate per thousand for positive units.

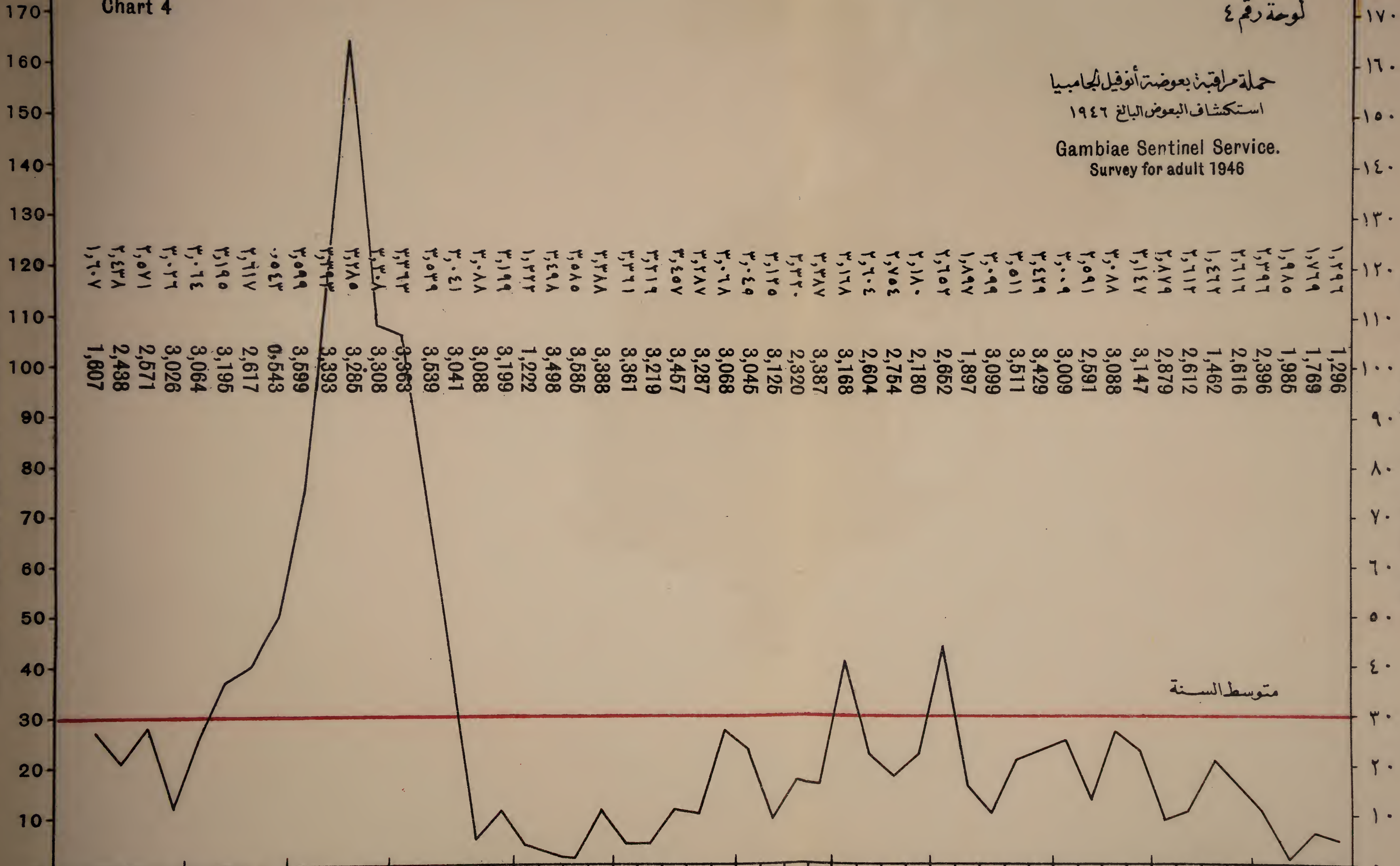


حملة مراقبة بعوضة أنوفيل الجامبيا
استكشاف البعوض البالغ ١٩٤٦

Gambiae Sentinel Service.
Survey for adult 1946

Rate per thousand for positive houses searched for Adult

النسبة المئوية للألف للمنزل الإيجابي

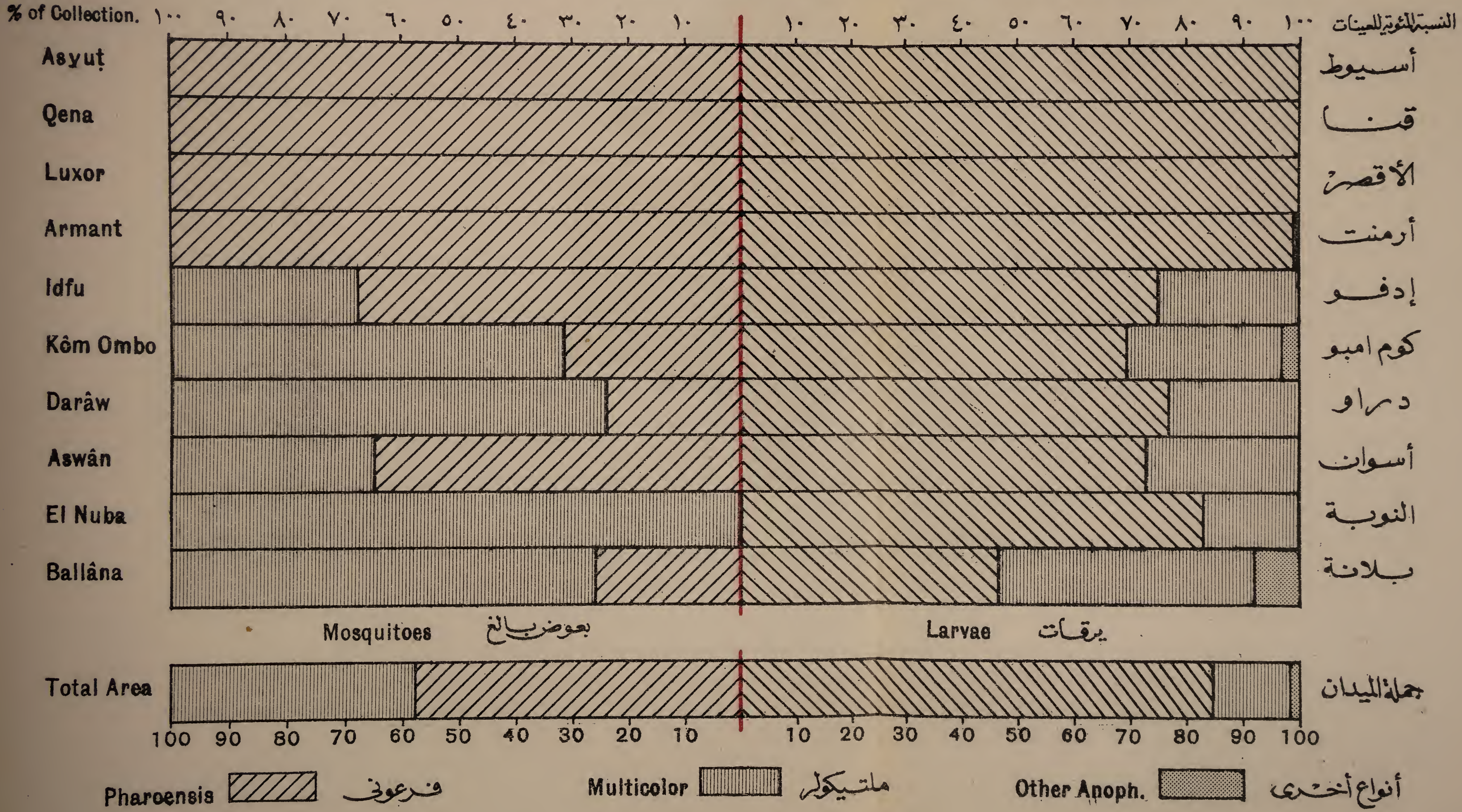


متوسط السنة

٥٢	٥٠	٤٨	٤٦	٤٤	٤٢	٤٠	٣٨	٣٦	٣٤	٣٢	٣٠	٢٨	٢٦	٢٤	٢٢	٢٠	١٨	١٦	١٤	١٢	١٠	٨	٦	٤	٢	١
ديسمبر			نوفمبر		أكتوبر		سبتمبر		أغسطس		يوليه		يونيه		مايو		أبريل		مارس		فبراير		يناير			
52	50	48	46	44	42	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	1
Dèc.			Nov.		Oct.		Sept.		Augt.		July		June		May		April		March		Feb.		Jan.			

الانتشار النسبي لأنواع الأنوفيل المتوطن بأجزاء المديريات الأربع الجنوبية خلال عام ١٩٤٦

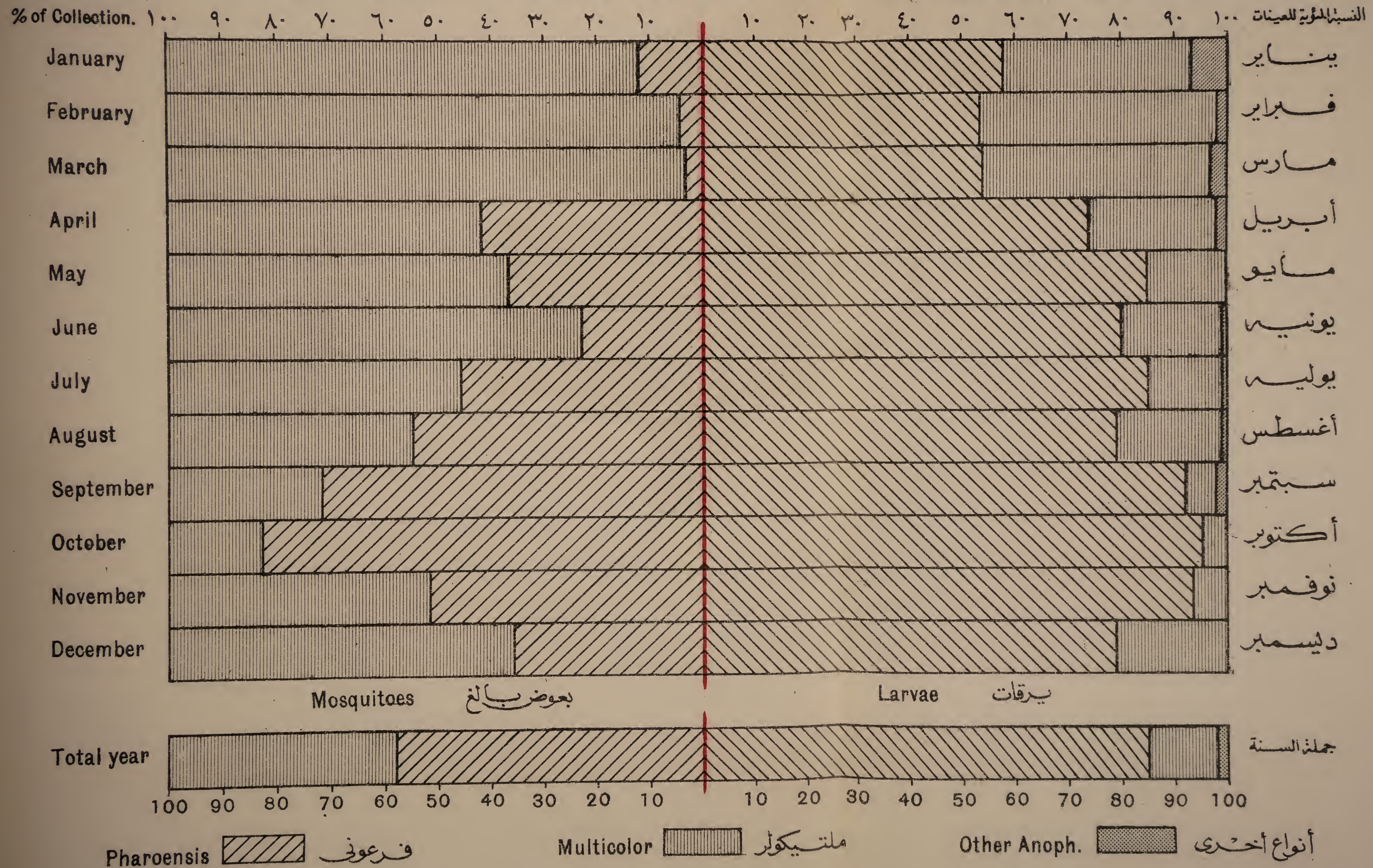
COMPARATIVE SPREAD OF ENDEMIC SPECIES OF ANOPHELINEAE IN THE FOUR SOUTHERN PROVINCES DURING YEAR 1946.



حملة مراقبت بعوض أنوفيل الجامبيا
Gambiae Sentinel Service.

الانتشار النسبي لأنواع الأنوفيل المتوطن بالمديريات الأربعة الجنوبية موزعاً حسب أشهر سنة ١٩٤٦

COMPARATIVE SPREAD OF ENDEMIC SPECIES OF ANOPHELINEAE IN THE FOUR SOUTHERN PROVINCES DURING YEAR 1946.



Chapter XIX.—SUMMARY OF THE WORK OF THE DEPARTMENT OF LABORATORIES

The total number of specimens examined bacteriologically in the Central, Provincial and Branch Laboratories, during the year 1946, was 733,538.

4,249 specimens were examined in this Section during the year under review.

The total number of samples examined chemically in the Central Laboratories, Assiut and Tanta Chemical Laboratories, during the year 1946, was 64,425.

(a) Bacteriological Service.

The total number of samples of water, aerated water, ice and syrup examined by this section, during the year 1946 was 5,532.

(b) Chemical Service.

During the year some 559 samples of water have been subjected to chemical analysis

4.—*Antirabic Institute and Hospital.*

During the year 1946, --11853 patients attended the Institute. Out of these, 9,487 were fully treated.

5.—Serum and Vaccine Institute.

The following Vaccines and sera have been prepared during the year 1946 :—

- | | |
|---|---|
| (1) T.A.B..... | 680,245 ccs. |
| (2) Anti—plague vaccine | 148,950 ccs. |
| (3) Cholera vaccine | 59,500 ccs. |
| (4) Diphtheria prophylactic (Formol Toxoid) | 41,335 boxes,
each box for one person. |
| (5) Calf lymph vaccine | 18,219,250 doses. |
| (6) Diphtheria antitoxin | 2,400 amps. |
| | 10 ccs. (containing 4000 I.U.) |
| | 2,115 amps. |
| | 10 ccs. (containing 10,000 I.U.) |
| | 3,597 amps. |
| (7) Anti-scorpion serum | 5 ccs. (containing 4000 I.U.) |
| | 130 litres,
out of which 4,860 amps. have
been filled and packed. |

Chapter XX.—SUMMARY OF THE WORK OF FOUAD I INSTITUTE FOR TROPICAL DISEASES

OUT-PATIENTS DEPARTMENT

Patients visiting this department during 1946 numbered 4,947 divided as follows :—

- (1) Males above 12 years of age 2,581.
- (2) Females above 12 years of age 1,696.
- (3) Males under 12 years of age 454.
- (4) Females under 12 years of age 216.

On presenting themselves, the patients are examined clinically. Their urines are examined for bilharzia ova, the stools for parasites, ova, and cysts ; and the haemoglobin content of their blood is estimated. Other investigations are carried out on the following days according to condition of individual cases. Such investigations include :—

A.—*Haematology Department.*

- (a) Red cell counts and estimation of diameter of volume indices.
- (b) White cell counts, total and differential.
- (c) Platelet count.
- (d) Estimation of Bleeding and Coagulation time.
- (e) Erythrocytic sedimentation rate.
- (f) Bone marrow biopsy.
- (g) Blood smears and thick drops for parasites.

B.—*Biochemistry Department.*

- (a) Complete urinalysis.
- (b) Chemical examination of the blood for plasma proteins, cholestrol, blood urea, bilirubin etc.
- (c) Performance of liver function tests and estimation of kidney functions and fractional test meals.
- (d) Estimation of fats in stools and testing them for occult blood.

C.—*Department of Bacteriology.*

- (a) W.R. & Kahn reactions.
- (b) Widal agglutination.
- (c) Urine and stool cultures.
- (d) Examination of sputum.

X-Ray examination as well as electrocardiograms and estimations of the B.M.R are carried out for research purposes in the diagnosis of diseases and to elicit the effect of recently introduced medicaments in tropical medicine on the cardiovascular system.

Various parasites have been treated in the out-patients department as shown in accompanying tables. Patients suffering from organic diseases contraindicating the use of anthelmintics in the O.P. were either admitted and treated as in-patients or were transferred to general hospitals. Patients free from parasites and suffering from organic diseases were transferred to specialised sections of the various hospitals. Such patients totalled 549.

INCIDENCE OF INFECTION WITH VARIOUS PARASITES

Urinary haematobium bilharziasis	...	...	...	...	...	...	1,231	patients
Intestinal haematobium bilharziasis	...	...	...	...	...	...	178	"
Intestinal mansoni bilharziasis	...	...	...	...	...	...	294	"
Ancylostomiasis	...	...	...	...	...	...	1,064	"
Ascariasis	...	...	...	...	...	...	1,176	;;
Taenia ova segments	...	...	...	...	...	...	66	"
Heterophyes heterophyes	...	...	...	...	...	...	37	"
Hymenolipes nana	...	...	...	...	...	...	184	"
Oxyuriasis	...	...	...	...	...	...	228	"
Trichocephalus	...	...	...	...	...	...	26	"
Trichostrongylus	...	...	...	...	...	...	268	"
Strongyloides larvae	...	...	...	...	...	...	22	"

TREATMENT OF BILHARZIASIS DURING 1946

During the first six months of 1946, Tartar emetic was used in the usual doses —namely 12 intravenous injections of a 6 per cent solution were given every other day. If the urine or the stools remained positive for B.O. after this course, 3 or more further injections were given.

In May 1946 at the suggestion of the Institute, a 6.5 per cent solution of repodral prepared locally, (Shrendall) of the Albany laboratories—where repodral powder is prepared -- confirmed the competence and practicability of such an easy and cheap method.

Thus a 6.5 per cent solution of repodral prepared at the Institute was used from the first of July 1946.

The method is briefly as follows :—

(a) The powder is dissolved in sterile distilled water in the proportion of 6.5 g. per 100 mls.

(b) The solution is filtered.

(c) The solution is sterilised by boiling for fifteen minutes.

(d) The apparatus used for preparation and sterilisation must be made of glass free from impurities especially iron and its salts which impart a dark colour to the solution.

Injections are given to adults weighing 60 or more kgs. in the following doses intramuscularly :—

First day 1.5 ccs.

Second day 3.5 ccs.

Third day — tenth day 5.0 ccs.

Children are given doses proportionate with their weight.

Urine and stools are then examined on the 11th day and if still positive the patient is given two or more injections making a total of twelve injections.

From comparison of the results of treatment by the intensive method with repodral and by Tartar emetic, it is obvious that :—

(1) Percentage of negative results after 12 injections of T.E. is 78 per cent.

(2) Percentage of negative results after 10 injections of repodral is 82 per cent.

(3) If these percentages represented apparent cures from bilharziasis, it will be seen that daily repodral injections are preferable to T.E. for several reasons, namely :—

- (a) Intramuscular injections are easier than intravenous injections and *Hakimas*, nurses and trained assistants can carry out the injections.
- (b) The ease with which children and adults difficult to inject intravenously are treated.
- (c) Abbreviation of the period of treatment to 10 or 12 days at most instead of three weeks.
- (d) The comparative rarity of toxic symptoms as nausea, rheumatic pains and occasional vomiting.

A special article on the mode of treatment with repodral was published in the July 1946 No. of the Journal of the Royal Egyptian Medical Association.

TREATMENT OF HELMINTHIC INFECTIONS

- (1) Ancylostomiasis : C.T.C. was used in 5 ccs. doses to adults weighing 60 kgs. or over.
- (2) Ascariasis was treated by oil of chenopodium 2.5 ccs. doses being given to adults weighing 60 kgs. or over.
- (3) Taeniasis, 5 ccs. of Filix mass were given to adults weighing 60 kgs. or above.
- (4) *H. heterophyes*, was also treated with 5 ccs. of Filix mass for adults weighing 60 kgs. or more.

In every case, the stools were examined after one week and if ova were still present, treatment was repeated. If negative results were obtained stools were re-examined after one and two months.

Patients were not considered cured unless two consecutive negative results at monthly intervals were obtained.

THE BACTERIOLOGY DEPARTMENT

1.—*Cultures of Stools for Dysentery.*

478 samples were examined out of which 113 were positive thus :—

B. Flexner	...	...	...	...	...	...	...	...	...	...	...	...	29
B. Shiga	...	...	...	...	...	...	...	...	...	...	...	...	14
B. Morgan	...	...	...	...	...	...	...	...	...	...	...	...	21
B. Sonne	...	...	...	...	...	...	...	...	...	...	...	...	22
B. Para typhoid A	...	...	...	...	...	...	...	...	...	...	...	...	4
B. „ B	...	...	...	...	...	...	...	...	...	...	...	...	5
B. Paracolon	...	...	...	...	...	...	...	...	...	...	...	...	18

2.—*Urine Culture.*

51 samples were examined out of which 26 were positive as follows :—

B. Coli	...	...	...	...	...	...	...	...	...	...	...	...	14
B. Friedlanders	...	...	...	...	...	...	...	...	...	...	...	...	1
B. Pyocyaneus	...	...	...	...	...	...	...	...	...	...	...	...	3
B. Typhosus	...	...	...	...	...	...	...	...	...	...	...	...	3
B. Paracolon	...	...	...	...	...	...	...	...	...	...	...	...	5

3.—*Examination of Sputum for T.B.*

56 samples were examined with 22 positive ones.

4.—*Blood Culture.*

Only two samples were cultured one of which turned to be containing Staph. and the other Strept.

5.—*Other Examinations.*

15 films from urinary discharge.

5 swabs for Diphtheria.

2 swabs for Leprosy.

THE BIOCHEMISTRY SECTION

Our work this year started with the idea of doing a general survey on the vitamins especially Vit. B. complex. This was preceded by collecting a vast number of references on the subject. The whole was prepared in the form of lecture which was delivered by Dr. M. S. El Ayadi.

From the experimental point of view, the "Menlich & Field" method for the estimation of nicotinic acid in urine was adopted. The method was carried out to the last stage where the extract was ready for test on the pulfrich photometer. It was unfortunate that the lamp was run down and could not be replaced.

Riboflavin was the next to be investigated. Two methods were available for its estimation, but both of them necessitated the use of fluoro-photometer which was not then delivered to the Institute among its orders from abroad.

Vitamin K. was indirectly tested by measuring the prothrombin time by quick method. The method was applied in a good number of cases of relapsing fever and a paper was published on the work.

Again the references concerning that vitamin were collected and a lecture by Nazih Latif Eff. was given on the subject.

The ministry imported from abroad a large stock of repodral powder. It was investigated in the section both biologically and chemically. Sterile vials were prepared, solutions of which were standardised so that each cubic centimeter contains 8.5 mgms. of trivalent antimony. The solutions were sterilised by means of Seitz filter and autoclaving. On testing these vials, it was found that they were fit from both the bacteriological and biological points of view.

Intensive treatment of Bilharzia was then started using the above solutions in the treatment. The Biochemical Section took in charge all the kidney and liver function tests for every patient before and after the treatment.

The different tests performed were the following :—

- (a) Colloidal gold test.
- (b) Cephalin cholestrol flocculation test.
- (c) Albumin and globulin ratio in blood.
- (d) Hippuric acid excretion test.
- (e) Urea clearance test.
- (f) Fouadin test in urine.

A paper was published on this work in the Journal of the Royal Egyptian Medical Association.

Again distribution of antimony in the different organs of experimental animals under the conditions of intensive treatment was investigated and a paper was published in the same journal on that work.

The effect of Tartar Emetic and Repodral on the prothrombin time of experimental animals was also investigated to compare its effect with that of N.A.B. which is known to affect the coagulation time of the blood. It was concluded from these experiments that antimony compounds do not give the same effect as arsenic compounds.

The M.L.D. 50 of stibophen was also calculated in white rats and was found to be 3.8 ccs. per Kilogram body weight.

Again administration of repodral solution per os to experimental animals was tried by means of a stomach tube. Antimony could then be detected in the organs of these animals but the amounts found were very small as compared with the amounts present in the control animals which received therapeutic doses of repodral by injection. The comparison was made between the antimony content of the livers of all the animals under

These experiments indicated that the absorption of repodral through the alimentary canal is very small. Research is being continued in order to increase the absorption of the antimony compound. Naturally, if we overcome this difficulty, it will be the nucleus for treating *Bilharzia per os*.

Again a lot of work was done for the purpose of preparing biological as well as synthetic media for cultivation of *entamoeba histolytica* and we actually succeeded in the preparation of a new medium from tomato juice in which the amoeba could grow as well as in the subcultures. This work was published. As regards the synthetic medium, we could prepare a medium containing cystine, choline, cholestrol, rice starch in buffered ringer. The amoeba did grow in that medium but its subcultures were not so successful.

The Institute had received parts of the "Bryera" plant to prepare its active principle and examine its effect on flat worms especially *Taenia*. An etherial extract was prepared mixed with olive oil. Its M.L.D. 50 was estimated and it was found that it is much bigger than the dose required to kill the worms and for that reason it was considered as a promising drug from that point of view.

Again the Institute was asked to solve the problem concerning the possibility of any toxic symptoms that may arise to people if they are fed with bread which had its grains previously dusted with D.D.T. Experimental animals fed with such bread did not develop any toxic symptoms and their weights increased after one month feeding on that bread. At the end of the month very minute traces of D.D.T. could be detected in the organs of these animals. Again the bread itself when examined was found to contain traces of the drug. We could prove that the amount of D.D.T. that should have been theoretically present in the bread has volatilised in the oven during the baking of the bread.

Some other drugs were sent also to the Institute for investigation, *e.g.* *Crinodora* which was supposed to be an antimalarial drug. The tablets were extracted for their active principle and examined chemically by the ultraviolet lamp. It was found to possess the same formula and same melting point as atebirin.

Again we were asked to investigate an insecticidal drug. Its analysis revealed that it is Diemethyl phthalate.

We also keep an eye always on modern methods which appear in the literature. We examine such methods and if we find them advantageous in the diagnosis of any of the endemic diseases they are immediately introduced into the routine of the laboratory.

Among the methods tried were the Thymol turbidity test and Laevulose tolerance test; the latter being estimated as laevulose and not as glucose. The first method appears promising as a liver function test while the second does not seem to be of much help.

Besides, some 4,000 routine samples from the in and out-patients of the Institute's hospital were investigated in this Section during the year. Details of these samples are given in table No.110

From the administration point of view all the chemical and glassware stocks were checked and the amounts of each article recorded in a special ledger for future reference.

TABLE No. 110.—DETAILS OF THE ROUTINE WORK OF THE BIOCHEMISTRY SECTION

Glucose tolerance curve	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35
Laevulose tolerance curve	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
Blood glucose	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	67
Blood urea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	59
Blood uric acid	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
Blood calcium	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
Cephalin cholestrol test	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	103
Gastric test meal...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	109
Quick test .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	58
Urea clearance test	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	199
Urine complete analysis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,261
Urine urea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	109
Stools for occult blood	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	153
Fouadin test	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	193
Alb/glob. ratio (blood)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	136
Colloidal gold test	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	135
Icterus index	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	295
Van den bergh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	78
Blood cholestrol	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22
Ascitic fluid Sp. gr., Proteins N.P.N.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
Ascitic fluid N.P.N.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
Blood phosphorus...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
TOTAL																	3,987

PROTOZOA SECTION

Cultivation of Entamoeba histolytica.

We succeeded in the cultivation of *Entamoeba histolytica* on various new media:—

(1) An extract of hydatid scolices. Scolices were dried at first and then an extract was made with Ringer's solution (0.5 per cent solution). Rice starch was added to the tubes of the medium before inoculation of the stools. This new medium was very successful and it was published in the Journal of the Royal Egyptian Medical Association.

Extracts of other tissues with Ringer's solution were also tried for the cultivation of *E. histolytica* e.g. *Taenia saginata* and *fasciola* worms, and chicken embryos tissues, but they were not successful. Chicken embryos extract, however, showed some growth of amoeba.

(2) Tomato juice medium. A medium for the cultivation of *E. histolytica* made from a diluted tomato juice with buffered Ringer's solution was devised. The buffer used in this medium was tri sodium phosphate. Rice starch was added to the medium before inoculation of the stools. The subject was published in the Journal of the Royal Egyptian Medical Association.

(3) Skin extract medium. Skin taken from perineal region of puppies was boiled in the Ringer's solution and the extract was then diluted with the above mentioned buffered Ringer's solution. Rice starch was added to each tube of medium before inoculation of the stools.

(4) It seemed to us that the buffered Ringer's solution with tri sodium phosphate was a good basis for making media for the cultivation of *E. histolytica*.

We tried the addition of many powdered cereals to that basis, e.g. lentils, beans, soya bean and we found that the amoeba grew in these media. Rice starch was also added before inoculation of the stools.

(5) Synthetic medium. The above experiments lead us to try a synthetic medium for the cultivation of *E. histolytica* made from the above mentioned buffered Ringer's solution with tri sodium phosphate and ingredients known to be favourable for the growth of that amoeba, e.g. casein, albumin cystine, methionine, tyrosine, choline, water soluble vitamins, and cholestrol, etc.

After many experiments we succeeded in the cultivation of the amoeba in a medium made from buffered Ringer's solution with tri sodium phosphate, choline, cystine, cholestrol and rice starch. The pH was adjusted to from 7·0 to 7·8. The above mentioned ingredients seemed to us to be very essential for the growth of *E. histolytica*.

Subcultures were not successful.

Isolation of a yeast strain.

We could isolate a strain of yeast dropped accidentally in the choline solution used by us in the previous experiments. At first we cultivate it on Sabaraud's medium. Bacterial growth as well as the yeast growth were heavy in this medium. We then tried to isolate the yeast by the addition of alcohol to the medium to kill the bacteria only but that was not successful. We then used (KCNS) 0·5 M. solution. After several subcultures the yeast was grown very pure.

Routine work: examination of stools from patients for detection of intestinal protozoa :—

1,794 specimens of stools were examined for intestinal protozoa and the following table No. 111 shows our findings.

TABLE No. 111

Number of specimens examined one time	1298	Percentage
<i>Entamoeba histolytica</i> vegetative... ..	68	5·2
„ „ cyst	38	2·9
„ coli	325	25·3
<i>Endolimax nana</i>	21	1·6
<i>Iodamoeba butschlii</i>	34	2·6
<i>Giardia lamblia</i>	56	4·3
<i>Trichomonas hominis</i>	93	7·1
<i>Chilomastix mensili</i>	50	3·08
Negative specimens	612	47·08
Number of specimens examined more than one time	448	34·5
Total number of specimens	1,794	

KHANKA MALARIA RESEARCH STATION

The area of this station is divided into four sections. In view of this year's high Nile flood, seepage water appeared in several places and the station had to double its efforts to exterminate anopheline larvae which bred in some of these places.

Of 19,496 blood specimens examined by the station, 1,160 were returned positive for malaria giving an incidence rate of 5·9 per cent or almost the same rate as last year.

Tests for therapeutic properties were made on two new drugs: *ARALEN* and *CAMAQI*. Observation cards were made for all patients treated by these drugs and sent to Fouad I Research Institute.

Specimens were taken from either persons living within the area of the station or outside it. Of 16,310 specimens taken from the former, 453 or 2·7 per cent were returned positive (411 benign and 42 malignant). Of 2,088 specimens taken from the latter, 705 or 33·7 per cent were returned positive (653 benign and 52 malignant).

Despite the increased rice cultivated areas, the incidence rate of malaria was satisfactory as a result of larvae control measures within rice cultivations and clearing of drains.

Malaria in Gebel el Asfar Farm.

Spraying with mazut of mosquito breeding places, ponds and stagnant water collections was maintained for the extermination of mosquitoes. Of 1,503 specimens examined 14 were returned positive for malaria.

Malaria in Abu Zaabal Prison.

Of 1,258 specimens examined, 23 were returned positive for malaria.

FAYED MALARIA RESEARCH STATION

The malaria control activities of this station are confined to the area lying between the Great Bitter Lake, the Suez fresh water canal and the railway line between Ismailia and Suez along which British military constructions abound. Included in this are Fayed, Fanara and Geneifa villages. Rice cultivation is forbidden within this area. Other cultivations include sesame, peanuts, maize, barley, wheat and clover. Irrigation water is drawn from the Suez fresh water canal and by means of channels. Though irrigation is based on rotation, the farmers often irrigate their lands daily. Hence water collects in several drains which throw in the Main Malaria Drain.

In Geneifa area several irrigation and draining canals were constructed namely, northern and southern Geneifa canals which are used at the same time as drains.

The work of the station is divided into preventive and treatment. The former consists of weekly dusting with Paris-green of canals and miskas, spraying drains and ponds with malariol, clearing the main malaria drain and other government drains, control of private drains, filling in of small breeding places and spraying private cisterns with malariol.

Treatment consists of administering simple drugs to malaria patients in addition to the routine course of treatment.

11,058 specimens were examined of which 66 or 0.59 per cent were returned positive (57 benign and 9 malignant).

90 anopheles mosquito breeding places have been detected, mostly of the Pharoensis species. Special attention is paid to the clearing from weeds and dusting with larvicides of all breeding places.

Part VI.-APPENDICES

Chapter XXI.—SUMMARY OF THE WORK OF THE MEMORIAL OPHTHALMIC LABORATORY, GIZA

Research Work.

The work of this Laboratory during the past decade on the epidemiology and treatment of the acute ophthalmias and trachoma was this year extended to the villages in the form of a large-scale field experiment. Many major and subsidiary problems are under investigation and results will be reported in due course. At the Laboratory, improved methods of treatment were evolved.

Pathology.

The routine pathological work of the Government Ophthalmic Hospitals was carried out as usual at the Laboratory.

367 pathological specimens were reported upon of which 45 were enucleated globes.

Post-Graduate Instruction.

As in previous years, the Staff of the Laboratory shared in the teaching of candidates for the Diploma of Ophthalmic Medicine and Surgery. Courses of lectures on bacteriology, fundus diseases, slit-lamp microscopy were given, and practical demonstrations were held.

Appendix I.— MEDICAL PERMITS

TABLE NO. 112.—SHOWING THE NUMBER OF PRACTITIONERS OF THE MEDICAL AND ALLIED PROFESSIONS AT THE END OF THE YEAR 1946 AS COMPARED WITH THAT OF THE YEAR 1945.

Profession	At the end of 1945	At the end of 1946
Medical Practitioners	4,139	4,287
Veterinary Surgeons	501	529
Dental Surgeons	522	527
Dentists without diplomas*	119	118
Pharmacists	1,089	1,140
Asst. Pharmacists*	332	332
Midwives	810	871

* No Permits are now issued to persons of these two categories.

TABLE NO. 113.—SHOWING THE NUMBER OF PERSONS AUTHORISED TO PRACTISE THEIR PROFESSIONS
IN EGYPT DURING THE LAST FIVE YEARS

Profession	1942	1943	1944	1945	1946
Medical Practitioners	158	115	100	151	194
Veterinary Surgeons... ..	29	28	14	12	28
Dental Surgeons	13	10	17	9	8
Pharmacists	45	43	25	46	62
Midwives	43	25	30	59	61
Dayas } Green Permits	193	276	77	147	192
} White Permits	1	3	2	2	—
Barbers	3	11	5	14	2

Appendix II.—REPORT ON THE WORK OF THE CENTRAL, GOVERNORATE AND PROVINCIAL MIDICAL COMMISSIONS DURING THE YEAR 1946,

The Central Medical Commission.

The number of medical certificates issued by the Central Medical Commission during 1946 was 24,929, *i.e.* 180 certificates more than in 1945, in spite of the extension of the attributions of the Medical Commissions in Governorates and Provinces to cover the granting and approval of sick leaves up to 60 days and the invaliding out of service of temporary officials and hors cadre employees and daily paid staff without further reference to the Central Medical Commission for final sanction.

Of this number 11,725 candidates for government service or educational missions abroad were examined by the Central Medical Commission. These consisted of 6,421 candidates for permanent or temporary posts, 292 for educational missions and 5,012 hors cadre posts.

63.1 per cent of the first group and 47 per cent of the last group passed the medical examination. Of the 36.9 per cent failures in the first group, 22 per cent failed in vision, Myopia accounting for most of them; 7.5 per cent for defects of the urinary system; albumen or traces thereof being the main cause; 2.5 per cent for heart diseases, with incompetency of the heart as the main complaint, and 4.9 per cent for other diseases, *e.g.* varicoceles, hydroceles not treated or removed by operation, deformation, debility or respiratory diseases. Of the 53 per cent failures in the last group, 33.3 per cent failed in vision—myopia accounting for most of them; 12.1 per cent for defects of the urinary system, albumen or traces thereof being the main cause; 1.4 per cent for heart diseases, with incompetency of the heart as the main complaint and 6.2 per cent for other diseases, *e.g.* varicoceles, hydroceles not treated or removed by operation, deformation, debility, flat foot or respiratory diseases

A total of 9,687 medical certificates dealt with leaves granted to government officials reporting sick. These consisted of 6,620 pensionable and temporary officials and 3,067 hors cadre employees.

Of those granted sick leaves by the Central Medical Commission or by the Cairo Medical Officers of Health and approved by the Central Medical Commission, 3,448 pensionable and temporary officials and 1,016 hors cadre employees were found suffering from medical diseases and 1,821 pensionable and temporary officials and 715 hors cadre employees were found suffering from surgical and ophthalmic diseases.

Herebelow are the diseases accounting for the sick leaves and the ratio of their prevalence :—

TABLE No. 118

Diseases	Pensionable and Temporary Officials		Hors Cadre Employees	
	Number	Percentage to the Total	Number	Percentage to the Total
		%		%
Nose and Larynx	236	4.5	64	3.7
Bronchi and Lungs	248	5.4	87	5.0
Heart and Blood Circulatory System	577	11.0	70	4.0
Stomach and Intestines	122	2.3	43	2.4
Liver	228	4.3	41	2.3
Kidney and Cystitis	219	4.2	49	2.6
Neurasthenia and Mental Diseases	259	4.9	61	3.5
Nervous System	149	2.9	27	1.5
Anaemia and General Debility	474	9.0	185	10.7
T.B.	380	7.2	212	12.2
Syphilis	9	0.2	3	0.1
Rheumatism	275	5.2	96	5.5
Fevers	145	2.8	43	2.4
Other Medical Diseases	91	1.7	35	2.0
Eye and Dental Diseases	299	5.6	73	4.2
Appendicitis	48	0.9	13	0.7
Urinary System and Stones	34	0.7	6	0.3
Various Surgical Operations	1,038	19.7	445	25.7
Fractures	187	3.5	106	7.1
Minor Surgical Operations (fistula, piles, hernia and hydroceles)	215	4.0	70	4.0

45,738 officials and employees were granted from 1-10 days sick leave by Cairo Medical Officers of Health and by Markaz and Sanitary Out-posts in all the Provinces and Governorates during the year 1946. Of these, 35,105 or 76·7 per cent suffered from medical diseases, 8,133 or 17·8 per cent suffered from surgical diseases and 2,500 or 5·5 per cent suffered from ophthalmic diseases. The total number of days of sick leave granted to the pensionable and temporary officials only amounted to 135,856.

1,691 pensionable and temporary officials and 720 hors cadre employees in Cairo only were granted from 1-10 days sick leave by the Central Medical Commission or by Cairo Medical Officers of Health. 320 pensionable and temporary officials and 170 hors cadre employees were examined by the Central Medical Commission but were not granted any sick leave.

955 pensionable and temporary officials and 1,004 hors cadre employees were examined by the other Provincial and Governorate Medical Commissions but were not granted any sick leave.

3,578 pensionable and temporary officials and 1,011 hors cadre employees were granted from 11 to 30 days sick leave and over by the Central Medical Commission and by Cairo Medical Officers of Health.

The Central Medical Commission granted 37 pensionable and temporary officials longer sick leaves terminating by their retirement on pension; and pronounced 163 hors cadre employees medically unfit for further service. 25 pensionable and temporary officials and 16 hors cadre employees were pronounced fit for further service.

Medical Examination of Private and Passenger "Pilots"

Of 80 candidates for private pilot licence "A" examined by the Central Medical Commission during 1946, 56 were found fit (51 in the first examination, 2 in the second and 3 in the third examination). Of the 24 failures 18 were examined once and 6 twice.

Of 31 candidates for passenger pilot licence "B" examined by the Central Medical Commission during 1946, 27 were found fit (24 in the first examination, 1 in the second and 2 in the third examination). 2 of the 4 failures were examined once and 2 twice.

Out of 93 private pilots examined for renewal of licences, 87 were found fit (86 in the first examination and 1 in the second examination). 3 of the 6 failures were examined once, 2 were examined twice and 1 was examined three times.

Out of 83 passenger pilots examined for renewal of licences, 79 were found fit in the first examination. 3 of the 4 failures were examined once and 1 was examined twice.

Provincial and Governorate Medical Commissions.

A total of 47,310 medical certificates were issued by the Provincial and Governorate Medical Commissions during the year 1946 ; i.e. an increase of 2,520 certificates over those of last year.

TABLE No.119 .—ANNUAL REPORT ON THE WORK OF THE CENTRAL, PROVINCIAL AND GOVERNORATE MEDICAL COMMISSIONS DURING THE YEAR 1946

Objects of Medical Examinations	Number of Cases															Diseases												Causes of Rejection of Candidates applying for Entry to Service																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	For Admission to Service						Candidates for Missions			For Sick Leave		Invaliding			For Determination of Age		Other Examinations			Total		Defective Vision	Urinary System		Respiratory System		Circulatory System		Nervous System		Digestive System		Other Diseases	Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	Pensionable and Temporary		Hors Cadre	Fit	Unfit	Refected in 1st Session	Refected in 2nd Session	Granted		Refused		Unfit		Fit		P. & T.		H. C.	Com. of Pension	M. Auth. Nafars	Other Cases		H. C.	P. & T.	P. & T.		H. C.		P. & T.		H. C.	P. & T.			H. C.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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NB.—P. = Pensionable, T. = Temporary. H.C. = Hors Cadre.

TABLE No. 120.—SHOWING CLASSIFICATION OF DISEASES CONTRACTED BY OFFICIALS AND EMPLOYEES FOR WHICH SICK LEAVES HAVE BEEN GRANTED BY THE CENTRAL, PROVINCIAL AND GOVERNORATE MEDICAL COMMISSIONS AND BY THE DISTRICT M.O.S. IN CAIRO AND APPROVED BY THE C.M.C. DURING THE YEAR 1946

Medical Diseases		Surgical and Ophthalmic Diseases	
1	Nose and Larynx	1	Eye Diseases
2	Bronchi and Lungs	2	Ear Diseases
3	Heart and Cir. System	3	Appendicitis
4	Stomach and Intestines	4	Hernia
5	Liver	5	Fistula
6	Kidney and Cysts	6	Piles
7	Nervousness	7	Hydroceles
8	Mental Diseases	8	Urinary System and Stones
9	Anaemia and General Debility	9	Other Surgical Operations
10	Nervous System (Cereb. and Corp)	10	Fractures
11	T. B.	11	Dental Diseases
12	Syphilis		
13	Rheumatism		
14	Revers		
15	Other Medical Diseases		
	Total		Total
	P. & T.		P. & T.
	H. C.		H. C.
	236		213
	64		42
	284		44
	87		13
	577		48
	70		15
	122		42
	43		61
	228		14
	53		66
	7		24
	206		12
	54		34
	149		2
	27		6
	474		106
	185		187
	380		805
	212		222
	9		959
	3		111
	275		87
	96		38
	145		41
	43		146
	91		181
	35		66
	1.016		106
	3.448		116
	5.296		61
	4.480		36
	210		34
	271		69
	423		66
	313		271
	110		210
	72		423
	82		5.496
	51		9.744
	103		582
	133		566
	167		467
	80		409
	237		605
	170		970
	53		68
	40		20
	121		416
	117		508
	1,997		1.073
	2,714		1,223
	409		59
	911		199
	179		57
	96		216
	3,881		134
	4,697		317
			274
			518
			198
			548
			391
			660
			283
			1.051
			687
			1.039
			202
			500
			TOTAL

Central Medical Commission
Cairo.

Other Governors' and
Provincial Commissions

TOTAL

N.B.—P. = Pensionable.

T. = Temporary.

H.C. = Hors Cadre.

Appendix III.—REPORT ON THE WORK OF CENTRAL STORES

During the year under review, the Central Stores furnished and equipped the following units with the necessary apparatus and equipment:—

- (1) Equipment of four public bath-houses in Cairo.
- (2) „ a chemical laboratory at Beni Suef.
- (3) „ two ancylostoma branches within district hospitals.
- (4) „ two travelling ancylostoma hospitals.
- (5) „ two dental clinics.
- (6) Increasing bed accommodation in Demerdash Hospital.
- (7) Equipment of an ophthalmic hospital at Kaliub.
- (8) „ a permanent ophthalmic hospital accommodated in tents.
- (9) „ a nursing school at King's hospital.
- (10) „ a section for medical insects.
- (11) „ the Nutrition Section.
- (12) Completion of equipment of Port Said Polyclinic, the child welfare centre and the venereal diseases dispensary.
- (13) Equipment of a Sanatorium at Kom el Shokafa, Alexandria.
- (14) „ three child welfare centres.
- (15) „ two venereal diseases dispensaries in the provinces.
- (16) „ a mobile venereal diseases dispensary in the oases.
- (17) Providing beds and equipment for the accommodation of 20 resident medical officers.
- (18) Completing equipment of the Sera and Vaccine Institute of Gîza.
- (19) Equipment of two sterilization chambers in the Laboratories Department.
- (20) Purchase of two X-ray vehicles for examination and diagnosis of chest diseases.
- (21) Equipment of the fever hospital at Mehalla el Kobra.
- (22) „ the fever hospital at Fayoum.

TABLE No. 121.—Gives Summary of Work of The Central Stores during 1946 :

Kind of Work	Number
Receipt vouchers	10,869
Issue vouchers	101,943
Claims... ..	2,130
Correspondence, Outward... ..	184,282
Correspondence, Inward and Forms	150,894
Postal parcels despatched	14,348
Postal parcels received	3,567
Railway parcels despatched	60,230
Railway parcels received	3,505
Workshop Labour (articles repaired)	103,463
Workshop Labour (articles newly made)	148,637

New units inaugurated during the year were as follows :—

- (1) A permanent ophthalmic hospital in tents at Abu Kebir.
- (2) No. 42 Ancylostoma hospital at Badari.
- (3) Two ancylostoma branches within Samallut and Baliana Hospitals.
- (4) Eight chest diseases branches at Fareskour, Nag Hamadi, Mit Ghamr, Shubra-khit, Dikernes, Sembellawein, Kafr el Sheikh and Itsa in connection with chest diseases dispensaries.
- (5) A sanatorium at Kom el Shokafa, Alexandria.
- (6) Two chest diseases in-patients dispensaries at Sherbin and Sohag.
- (7) Three child welfare centres at Sayeda Zenab, Mansoura and Sennouris.
- (8) Farouk Ist polyclinic at Port-Said.
- (9) Venereal Diseases prophylactic centre at Ezbekieh.
- (10) Three venereal diseases clinics at Kair el Dawar, Khalifa and Old Cairo.
- (11) Two public health offices at Mansoura II and Kowasia.
- (12) A nursing school near the King's Hospital.
- (13) A new 20-bed ward at Demerdash Hospital.

Table No. 122 Is a statement of Contracts and Orders during 1946

Item	Number
General Adjudications	263
Local offers	128
Contracts	657
Local orders	525
Foreign orders	53
Forms 50 c.g... ..	4,132
Questions submitted to Contracts Board	1,993
Number of meetings of Contracts Board	138
Tenders submitted in general adjudications	1,503
Agreements	5
Miscellaneous Orders	49
Tenders submitted in local adjudications	591
Purchases by private contract	6

Appendix IV
TABLE No. 123—DETAILS OF BUDGET GRANTS AND EXPENDITURE OF UNIVERSITIES HOSPITALS

	Fouad Ist University Hospitals				Farouk University Hospitals			
	Budget Grants		Actual Expenditure		Budget Grants		Actual Expenditure	
	1945	1946	1945	1946	1945	1946	1945	1946
TITLE I								
Salaries, Wages and Allowances	127,812	132,348	129,738	133,281	38,526	36,377	31,056	32,542
TITLE II								
General Expenditure	371,100	412,600	418,367	408,623	91,800	81,700	90,288	91,855
TITLE III								
New Works	15,000	41,500	28	16,609	28,200	10,000	23,174	3,032
TOTAL	513,912	586,448	548,133	558,563	138,526	128,077	144,518	127,429

TABLE NO. 125. — DETAILS OF BUDGET GRANTS

TITLE I	Budget Grants		Actual Expenditure	
	1945	1946	1945	1946
	L.E.	L.E.	L.E.	L.E.
Salaries, Wages and Allowances	1,286,837	1,300,929	1,216,618	1,278,545
TITLE II				
General Expenditures	1,818,300	1,919,382	1,743,119	1,907,317
TITLE III				
New Works	792,200	914,174	268,658	972,878
TOTAL	3,897,337	4,134,485	3,228,395	4,158,740

TABLE NO. 126

	Fouad 1st Hospitals		Farouk 1st Hospitals		Total	
	1945	1946	1945	1946	1945	1946
Technical Posts :						
Permanent	88	88	20	20	108	108
Temporary	215	215	78	69	293	284
Adm. and Clerical Posts: ...						
Permanent	40	40	11	11	51	51
Temporary	8	8	—	—	8	8
Hors Cadre Personnel	1,356	1,312	290	286	1,646	1,598
TOTAL	1,707	1,663	399	386	2,106	2,049

Appendix V—SUMMARY OF A REPORT ON THE STATE OF PUBLIC HEALTH IN ALEXANDRIA

TABLE No 127.—SHOWING THE NUMBER OF INHABITANTS, TOGETHER WITH NUMBER OF BIRTHS, DEATHS, INFANTILE MORTALITY AND DEATHS DUE TO INFECTIOUS DISEASES IN THE VARIOUS DISTRICTS OF THE CITY OF ALEXANDRIA DURING 1946

Qism (District)	No. of Inhabitants	No. of Births	No. of Deaths	Infantile Mortality	No. of Deaths from Infectious Diseases
Gumrok	112,500	5,690	2,299	1,128	200
Manshieh	30,900	1,335	556	355	107
Labbane	58,000	3,087	1,389	571	299
Attarine	63,000	3,516	2,249	474	156
Minet el Bassal I	56,300	4,403	1,221	630	149
Minet el Bassal II	41,100	2,039	927	433	94
Karmouz I... ..	90,400	4,813	2,139	961	315
Karmouz II	95,900	6,205	2,604	1,382	386
Moharrem Bey	55,600	4,515	2,339	674	149
Hadra	93,300	5,428	2,673	873	173
Ramleh I	69,500	3,440	1,568	681	163
Ramleh II	31,500	1,630	831	354	75
Imported	—	—	—	—	68
TOTAL ...	788,000	44,980	20,685	8,405	2,332

Appendix VI.—REPORT ON THE WORK OF CAIRO CITY HEALTH DEPARTMENT

The estimated mid-year population of Cairo in 1946 was 1,533,900. The following is the distribution of this population in the different Qisms:—

Kubba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	43,900
Heliopolis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	53,100
Zeitoun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	48,200
Abbassia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	101,100
Ezbekia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	61,500
Rod el Farag	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	142,400
Shubra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	106,200
Sharabia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	44,100
Gamalia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	88,900
Bab el Shaaria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	104,200
Abdine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	81,300
Mouski	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	43,100
Darb el Ahmar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	89,300
Khalifa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	85,100
Sayeda I	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	76,300
„ II	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	72,300
Bulac I	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	51,000
„ II	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	59,200
Adawia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	48,400
Old Cairo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	64,800
Helwan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31,800
Maadi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37,700
TOTAL																				1,533,900

Births.

The total number of births (excluding still-births) registered during the year was 95,088, with an excess of 5,025 over last year, and a birth - rate of 61.9 per thousand of population.

Table No. 128 shows the number of births distributed on the various Qisms and rates per thousand of population.

The number of still-births registered during this year was 21,025 or a rate of 21.29 per thousand births as compared with 2,069 during 1945, 1,747 during 1944, 1,627 during 1943 and 1,530 in 1942.

Deaths.

During this year, a total of 53,427 deaths were registered in Cairo City of which 1613 occurred amongst non-residents. This leaves 51,814 deaths for Cairo proper with an excess of 1945 over the previous year, or a death - rate of 33.7 per thousand of population as compared with 33.9 during 1945, 36.2 during 1944 and 33.1 during the 5 years (1940-1944).

Table No. 128 shows the distribution of these deaths in the various Qisms and their rates as compared with each other and with the rates of previous years.

Infantile Mortality.

The total number of deaths of children under one year of age was 18,985 with an excess of 234 over the previous year or a rate of 199.8 per thousand births. This rate was 208 in 1945, 214.8 in 1944 and 201.1 during the 5 years (1940-1944).

The infantile mortality constituted 36.6 per hundred of the total deaths of Cairo, as compared with 37.6 during 1945.

Table No. 128 shows the distribution of these deaths in the various Qisms and their rates as compared with each other and with rates of previous years.

Causes of Infantile Mortality.

Diarrhoea and enteritis are still the most important diseases affecting children. They were responsible for 10,938 deaths or 57·7 per cent of the infantile deaths amounting to 18,985. Marasmas and general debility come next accounting for 5,411 deaths or 28·6 per cent. There were also 1,131 deaths or 5·8 per cent from respiratory diseases. This figure does not include deaths from bronchial and lobar pneumonia. Infectious diseases including pneumonia and lobar pneumonia accounted for 943 deaths or 4·9 per cent and the other diseases accounted for 562 deaths or 2·9 per cent of infantile deaths.

Death Inquiries.

The total number of uncertified deaths which required investigation during 1946 was 28,090 or 54·2 per cent of total deaths of Cairo.

District Medical Officers investigated 9,110 or 32·4 per cent of that number. The remaining deaths amounting to 18,980 were examined by District Midwives. See table No. 129.

Infectious Diseases.

The total number of cases of infectious diseases notified during 1946 was 29,196 and 2,691 cases from outside Cairo, as compared with 20,627 cases during 1945, 20,287 cases during 1944 and 27,771 cases during 1943.

The total number of deaths from infectious diseases during the year was 5,975 or a rate of 11·5 per cent of the total number of Cairo deaths as compared with 10·4 per cent in 1945, 13·2 per cent in 1944 and 15·8 per cent in 1943.

Table No. 130 shows the incidence of the most prevalent infectious diseases in Cairo Districts.

Typhoid.

The total number of typhoid cases notified during the year 1946 was 2,374 with 289 deaths or a rate of 1·5 and 0·188 respectively per thousand of population as compared with 3,145 cases with 394 deaths and a rate of 2·128, and 0·273 respectively during 1945.

It will be noticed that the incidence of the disease was less throughout the year than during 1945.

See table No. 131.

The number of persons vaccinated against typhoid this year was 177,471 receiving first injection and 152,152 receiving second injection.

Diphtheria.

The number of cases notified during the year 1946 was 991 with 199 deaths or a rate of 0·644 and 0·130 respectively per thousand of population as compared with 1,844 cases with 409 deaths and a rate of 1·248, and 0·276 respectively per thousand of population during 1945.

It will be noticed that the upward curve which began in 1945 continued until the week ending April 1, 1946, when it began to decline until the end of the year. See table No. 132.

68,531 children received three anatoxin injections against diphtheria during the year.

Measles.

The number of cases notified during the year 1946 was 1,629 with 962 deaths or a case-rate of 1·059 and a death-rate of 0·620 respectively per thousand of population as compared with 508 cases with 216 deaths and a rate of 0·343 and 0·146 respectively during 1945, and 1,366 cases with 761 deaths in 1944.

The highest incidence was recorded at Adawia, Old Cairo and Zeitoun respectively.

The increase this year is due to the outbreak of an epidemic once every 2 years. See table No. 133.

Typhus.

The number of Typhus cases notified this year was 141 with 40 deaths or a case-rate of 0.092 and a death-rate of 0.026 respectively per thousand of population as compared with 1,300 cases and 298 deaths during 1945, 1,784 cases and 420 deaths during 1944 and 8,652 cases and 1,868 deaths during 1943. This shows that the epidemic is on the decline. See table No. 134.

The number of persons vaccinated against typhus was 12,889 receiving first injection, 7,378 receiving second injection and 6,256 receiving third injection.

1,212 slides from living persons and 283 from dead were taken by Medical Officers of Health for bacteriological examination for Weil Felix. 34 from the former and 82 from the latter were returned positive.

Small-Pox.

20 cases of small-pox with no deaths were notified during 1946 or a case-rate of 0.013 per thousand of population, as compared with 121 cases and 6 deaths during 1945 or a rate of 0.081 and 0.004 respectively per thousand of population, 2,288 cases and 129 deaths during 1944 and 1,283 cases and 83 deaths during 1943. This shows that the smallpox epidemic which broke out in 1943 was nearing its end in 1946. See table No. 135.

Vaccination against Small-Pox.

Arrangements were made to carry out a general vaccination of the whole population once every 4 years; one fourth of the population being vaccinated each year.

Vaccination was started on December 4, 1945, in Helwan, Maadi, Old Cairo, Sayeda I and Sayeda II Qisms. The number of persons vaccinated during 1946 in these districts was 286,715.

Relapsing Fever.

An unprecedented relapsing fever epidemic broke out during 1946. A total of 11,903 cases with 351 deaths were recorded or a case-rate of 7.747 and a death-rate of 0.228 respectively per thousand of population as compared with 2,404 cases and 52 deaths or a rate of 1.627 and 0.003 respectively per thousand of population during 1945.

Arrangements were made for the periodical dusting with insecticides of persons, clothes and effects in the poorer quarters of the City. Some 1,403,487 persons were dusted during the year. See table No. 136.

Cerebro-Spinal Fever.

45 cases with 28 deaths were notified this year or a rate of 0.029 and 0.018 respectively per thousand of population, as compared with 36 cases and 23 deaths or a rate of 0.024 and 0.015 respectively during 1945 and 92 cases and 24 deaths during 1944. See table No. 137.

Scarlet Fever.

Only three cases were notified during 1946 with no deaths or a case rate of 0.001 per thousand of population, as compared with 3 cases in 1945 and 7 cases in 1944. See table No. 138.

Influenza.

The number of cases notified during 1946 was 4,634 with 14 deaths or a rate of 3.01 and 0.0009 respectively per thousand of population as compared with 2,604 cases and 8 deaths or a rate of 1.8 and 0.005 respectively during 1945.

Tuberculosis.

The number of cases of this disease notified during 1946 was 2,986 with 1,503 deaths or a rate of 1.940 and 0.977 respectively per thousand of population as compared with 3,082 cases and 1,567 deaths and a rate of 2.1 and 1.7 respectively during 1945.

Deaths attributed to Confinement.

The number of deaths attributed to confinement was 133 with a rate of 1·3 per thousand births as compared with 1·8, 1·3, 1·4, 1·9, 2·5 and 2·1 respectively during 1945, 1944, 1943, 1942, 1941 and 1940.

Out of this figure 42 were caused by puerperal fever with a rate of 0·46 per thousand births as compared with 0·5 during 1945, 0·4 in 1944, 0·51 in 1943, 0·55 in 1942, 0·9 in 1941 and 0·8 during 1940.

The total number of mothers who died within a fortnight of confinement (excluding puerperal fever cases) amounted to 91 as compared with 112 in 1945, 80 in 1944, 53 in 1943, 90 in 1942, 104 in 1940 and 117 in 1940.

The causes of these deaths were as follows : 20 eclampsia, 24 metrorrhagy, 5 placenta prævia, 1 caesarean case, 7 rupture of uterus, 7 difficult labour, 7 heart failure after confinement, 1 heart failure after criminal confinement, 2 peritonitis, 1 peritonitis after criminal abortion, 1 shock after labour, 5 abortion, 2 acute endocarditis, 1 ectopic gestation, 3 toxemia, 1 haemorrhagia after confinement, 1 acute yellow atrophy after abortion and 2 pneumonia.

Disinfection.

Of a total of 107,080 rooms disinfected during 1946, 57,431 rooms were done by Fom el Khalig disinfection station and the remaining 49,649 were done by Abbassia disinfection station.

TABLE No. 128.—VITAL STATISTICS OF CAIRO CITY 1946

Cairo Districts	Mid-year population	No. of Deaths	Rate per 1000 of pop.	No. of Births	Rate per 1000 of pop.	No. of deaths of child. (0-1).	Rate of infantile deaths per 100 births
Kubba... ..	43,900	1,598	36.4	3,551	80.8	651	183.3
Heliopolis	53,100	1,096	20.7	2,083	35.5	308	147.8
Zeitoun	48,200	2,130	44.1	3,853	79.9	777	201.7
Abbassia	101,100	2,823	27.9	6,483	64.1	872	134.5
Ezbekia	61,500	1,530	24.8	2,681	43.5	474	176.8
Rod el Farag ...	142,400	3,924	27.5	8,054	56.1	1,531	190.1
Shubra	106,200	3,575	33.7	7,670	72.1	1,379	170.9
Sharabia	44,100	2,134	48.3	3,767	5.4	840	222.9
Gamalia	88,900	3,461	38.9	5,536	62.2	1,190	214.9
Bab el Shaaria ...	104,200	3,348	321.1	6,104	58.5	1,231	185.2
Abdine	81,300	1,987	24.4	3,236	39.7	636	196.5
Mouski	43,100	1,207	28.4	2,053	47.4	468	227.9
Darb el Ahmar. .	89,300	2,960	33.1	5,408	60.5	1,143	211.3
Khalifa	85,100	3,224	37.8	5,385	63.2	1,222	226.9
Sayeda I	76,300	3,280	42.9	5,896	77.2	1,268	
„ II	72,300	2,153	29.7	3,547	49.0	87	
Bulac I	51,000	1,831	35.9	2,752	53.9	62	
„ II	59,200	1,893	31.9	3,212	54.2	682	
Adawia	48,400	2,361	48.7	5,340	110.3	884	
Old Cairo	64,800	2,855	44.5	4,695	72.4	1,073	228.5
Helwan	31,800	1,218	38.3	1,898	59.6	385	202.8
Maadi	37,700	1,226	32.5	1,884	49.9	471	250
TOTAL ...	1,533,900	51,814	33.7	95,088	61.9	18,985	199
1945	1,477,100	49,869	33.9	90,063	60.9	18,751	208
1944-1940	7,055,800	233,749	33.1	350,116	49.6	76,730	210.5
1939-1935	6,726,800	174,236	25.9	283,268	42.1	5,526	
1934-1930	5,985,200	159,517	28.3	262,979	43.9	5,325	
1929-1925	4,759,800	154,195	32.3	226,318	47.5	5,176	

TABLE No. 129.—DISTRICT DISTRIBUTION OF UNCERTIFIED DEATHS AND DEATH INQUIRIES IN 1946

Cairo Districts	No. of Deaths	No of Uncertified Deaths			Rate of Uncertified Deaths to General Deaths %
		No. of Deaths investigated by M.O. of Qisims	No. of Deaths investigated by Mowalidas	Total	
Kubba	1,598	509	615	1,124	70·3
Heliopolis	1,096	88	222	310	28·2
Zeitoun	2,130	397	1,032	1,429	67·1
Abbassia	2,823	153	217	370	13·1
Ezbekia	1,530	127	405	532	34·7
Rod el Farag	3,924	196	883	1,079	27·5
Shubra	3,575	300	999	1,299	36·3
Sbarabia	2,134	505	1,185	1,690	79·1
Gamalia	3,461	198	178	376	10·8
Bab el Shaaria	3,348	862	1,011	1,873	55·9
Abdine	1,987	112	940	1,052	52·9
Mouski	1,207	208	393	601	49·7
Darb el Abmar	2,960	1,116	972	2,088	70·7
Khalifa	3,224	602	1,638	2,240	69·5
Sayeda I	3,280	600	1,387	1,987	60·5
„ II	2,153	642	796	1,438	66·7
Bûlac I	1,831	510	990	1,500	81·9
„ II	1,893	400	986	1,386	73·2
Adawia	2,361	348	1,390	1,738	73·6
Old Cairo	2,855	672	1,457	2,129	74·8
Helwan	1,218	230	616	846	65·7
Maadi	1,226	335	668	1,003	81
TOTAL	51,814	9,110	18,980	28,090	54·2

TABLE No. 130.—DISTRICT DISTRIBUTION OF THE PRINCIPAL INFECTIOUS DISEASES, 1946

Districts	Mid-year Population	Small-pox		Relapsing fever		Cerebro-Spinal fever		Typhus fever		Typhoid fever		Scarlet fever		Diphtheria		Measles	
		Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Kubba...	43,900	—	—	464	5	4	3	6	1	108	4	—	—	25	4	47	25
Heliopolis	53,100	—	—	591	20	—	—	5	2	150	28	—	—	40	11	41	6
Zeitoun	48,200	—	—	528	24	3	1	13	2	100	14	1	—	34	4	100	67
Abbassia	101,100	1	—	721	23	4	3	12	4	211	35	—	—	77	21	74	17
Ezbekia	61,500	—	—	532	15	1	1	5	2	100	10	1	—	20	7	46	29
Rod-el-Farag	142,400	1	—	902	22	4	1	9	—	137	6	—	—	62	13	52	21
Shoubra	106,200	3	—	974	37	1	—	7	4	182	22	—	—	65	11	71	25
Sharabia	44,100	1	—	678	10	1	—	5	3	78	7	—	—	21	4	27	4
Gamalia	88,900	—	—	729	10	2	—	4	—	121	22	—	—	56	11	45	9
Bab-el-Shaaria	104,200	—	—	652	20	2	2	4	2	163	22	1	—	69	10	78	25
Abdine	81,300	1	—	414	14	1	1	4	3	148	14	—	—	50	6	77	54
Mouski	143,100	—	—	219	2	2	—	3	1	77	6	—	—	28	7	28	17
Darb-el-Ahmar	89,300	5	—	669	17	2	2	13	4	139	24	—	—	59	15	102	58
Khalifa	85,108	1	—	558	12	2	2	14	3	104	7	—	—	63	14	76	43
Sayed I	76,300	1	—	496	14	3	3	7	3	104	16	—	—	86	7	97	65
Sayed II	72,300	3	—	354	10	3	3	5	1	147	18	—	—	83	15	99	69
Boulac I	51,000	1	—	560	23	4	3	7	3	67	12	—	—	42	16	97	54
Boulac II	59,000	1	—	267	14	1	—	2	—	61	4	—	—	28	7	66	56
Adawia	48,400	1	—	319	14	2	2	10	—	20	—	—	—	10	1	154	120
Old Cairo	64,800	1	—	835	25	4	2	4	1	91	9	—	—	49	9	203	155
Helwan	31,800	—	—	252	13	—	—	4	1	13	3	—	—	14	2	12	13
Maadi...	37,700	—	—	189	7	1	—	—	—	22	1	—	—	10	4	37	30
TOTAL FOR CAIRO	1,533,900	20	—	11,903	351	45	28	141	40	2,374	289	3	—	991	199	1,629	963

TABLE NO. 131.—TYPHOID CASES AND DEATHS IN CAIRO DISTRICTS IN 1946

District	Mid-year Population	Number of Cases	Case-rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case Mortality rates percent
Kubba	43,900	108	2.459	4	0.091	3.6
Heliopolis	53,100	150	2.825	28	0.427	19
Zeitoun	48,200	100	2.074	14	0.290	14
Abbassia	101,100	211	2.087	35	0.349	17
Ezbekia	61,500	100	1.630	10	0.163	10
Rod-el-Farag	142,400	138	1.962	11	0.077	9
Shubra	106,200	182	1.711	22	0.207	12
Sharabia	44,100	78	1.763	7	0.153	9
Gamalia	88,900	111	1.366	22	0.247	18
Bab-el-Shaaria	104,200	163	1.563	22	0.211	13
Abdine	81,300	143	1.819	14	0.172	9
Mouski	43,100	77	1.786	6	0.139	8
Darb-el-Ahmar	89,300	139	1.555	24	0.269	17
Khalifa	85,100	104	1.222	7	0.823	7
Sayeda I	76,300	104	1.362	16	0.210	15
Sayeda II	72,300	147	1.626	18	0.199	12
Boulac I	51,000	67	1.313	12	0.235	18
Boulac II	59,200	61	1.205	4	0.067	6.5
Adawia	48,400	20	1.413	—	—	—
Old Cairo	64,800	91	1.404	9	0.129	9.9
Helwan	31,800	43	1.352	3	0.094	7
Maadi	37,000	22	1.583	1	0.026	4.8
TOTAL FOR CAIRO	1,533,900	2,374	1.543	289	0.188	13

TABLE NO. 132.—DIPHTHERIA CASES AND DEATHS IN CAIRO DISTRICTS IN 1946

District	Mid-year Population	Number of Cases	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case Mortality rates percent
Kubba... ..	43,900	25	0.57	4	0.09	16
Heliopolis	53,100	40	0.75	11	0.21	28
Zeitoun	48,200	34	0.71	4	0.08	12
Abbassia	101,100	77	0.76	21	0.21	27
Ezbekia	61,500	20	0.33	7	0.11	35
Rod-el-Farag	142,400	62	0.44	13	0.09	21
Shubra	106,200	65	0.61	11	0.10	17
Sharabia	44,100	21	0.47	4	0.09	19
Gamalia	88,900	56	0.63	11	0.12	20
Bab-el-Shaaria	104,200	69	0.66	10	0.10	14
Abdine	81,300	50	0.61	6	0.07	12
Mouski	43,100	28	0.65	7	0.16	25
Darb-el-Ahmar	89,300	59	0.66	15	0.17	25
Khalifa	85,100	63	0.74	14	0.16	22
Sayeda I	76,300	06	1.13	7	0.09	8
Sayeda II	72,300	83	0.92	15	0.17	18
Boulac I	51,000	42	0.82	16	0.31	38
Boulac II	59,200	28	0.46	7	0.12	25
Adawia	48,400	10	0.21	1	0.02	10
Old Cairo	64,800	49	1.53	9	0.14	18
Helwan	31,800	14	0.44	2	0.06	14
Maadi	37,700	10	0.27	4	0.11	40
TOTAL FOR CAIRO	1,533,900	991	0.644	199	0.129	20

TABLE No. 133.—MEASLES CASES AND DEATHS IN CAIRO DISTRICTS IN 1946

District	Mid-year Population	Number of Cases	Case-rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates per cent
Kubba	43,900	47	1.07	25	56	52
Heliopolis	53,100	41	0.77	6	0.11	15
Zeitoun	48,200	100	1.83	67	1.39	67
Abbassia	101,100	74	0.73	17	0.16	23
Ezbekia	61,500	46	0.75	29	0.47	63
Rod-el-Farag	142,400	58	0.4	21	0.14	36
Shubra	106,200	72	0.68	25	0.23	36
Sharabia	44,100	21	0.48	4	0.09	19
Gamalia	88,900	47	0.53	9	0.10	11
Bab-el-Shaaria	104,200	75	0.72	25	0.23	33
Abdine	81,300	78	0.9	54	0.63	70
Mouski	43,100	27	0.63	17	0.39	63
Darb-el-Ahmar	89,300	102	1.14	58	0.64	57
Khalifa	85,100	76	0.87	43	0.50	56
Sayeda I	76,300	97	1.27	66	0.85	67
Sayeda II	72,300	99	1.37	69	0.95	70
Boulac I	51,000	97	1.9	54	1.05	55
Boulac II	59,200	66	1.1	56	0.94	85
Adawia	48,400	154	3.18	120	2.47	78
Old Cairo	64,800	203	3.13	155	2.39	71
Helwan	31,800	12	0.38	12	0.40	100
Maadi	37,700	37	0.98	31	0.78	81
TOTAL FOR CAIRO	1,533,900	1,629	1.059	962	0.620	59

TABLE No. 134.—TYPHUS CASES AND DEATHS IN CAIRO DISTRICTS IN 1946

District	Mid-year Population	Number of Cases	Case-rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates per cent
Kubba... ..	43,900	6	0.14	1	0.02	17
Heliopolis	53,100	5	0.09	2	0.04	40
Zeitoun	48,200	13	0.27	2	0.04	15
Abbassia	101,100	12	0.12	4	0.04	33
Ezbekia	61,500	5	0.08	2	0.03	40
Rod-el-Farag	142,400	9	0.06	—	—	—
Shubra	106,200	7	0.07	4	0.04	57
Sharabia	44,100	5	0.11	3	0.07	60
Gamalia	88,900	4	0.04	—	—	—
Bab-el-Shaaria	104,200	4	0.04	2	0.02	50
Abdine	81,300	4	0.05	3	0.04	75
Mouski	43,100	3	0.05	1	0.02	33
Darb-el-Ahmar	89,300	13	0.15	4	0.04	31
Khalifa	85,100	14	0.16	3	0.04	21
Sayeda I	76,300	7	0.09	3	0.04	43
Sayeda II	72,300	5	0.06	1	0.01	20
Boulac I	51,000	7	0.14	3	0.06	43
Boulac II	59,200	2	0.03	—	—	—
Adawia	48,400	2	0.04	—	—	—
Old Cairo	64,800	10	0.15	1	0.01	10
Helwan	31,800	4	0.13	1	0.03	25
Maadi	37,700	—	—	—	—	—
TOTAL FOR CAIRO	1,533,900	141	0.092	40	0.026	28

TABLE NO. 135.—SMALL-POX CASES AND DEATHS IN CAIRO DISTRICTS IN 1946

District	Mid year Population	Number of Cases	Case rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates per cent
Kubba	43,900	—	—	—	—	—
Heliopolis	53,100	—	—	—	—	—
Zeitoun	48,200	—	—	—	—	—
Abbassia	101,100	1	0.010	—	—	—
Ezbekia	61,500	—	—	—	—	—
Rod-el-Farag	142,400	1	0.007	—	—	—
Shoubra	106,200	3	0.028	—	—	—
Sharabia	44,100	1	0.023	—	—	—
Gamalia	88,900	—	—	—	—	—
Bab-el-Shaaria	103,200	—	—	—	—	—
Abdine	81,300	1	0.012	—	—	—
Mouski	43,100	—	—	—	—	—
Darb-el-Ahmar	89,300	5	0.056	—	—	—
Khalifa	85,100	1	0.012	—	—	—
Sayeda I	76,300	1	0.023	—	—	—
Sayeda II	72,300	3	0.033	—	—	—
Boulac I	51,000	1	0.020	—	—	—
Boulac II	59,200	—	—	—	—	—
Adawia	48,400	1	0.021	—	—	—
Old Cairo	64,800	1	0.025	—	—	—
Helwan	31,800	—	—	—	—	—
Maadi	37,700	—	—	—	—	—
TOTAL FOR CAIRO	1,533,900	20	0.013	—	—	—

TABLE NO. 136.—RELAPSING FEVER CASES AND DEATHS IN CAIRO DISTRICTS IN 1946

District	Mid-year Population	Number of Cases	Case-rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates per cent
Kubba	43,900	464	10.5	5	0.11	1.1
Heliopolis	53,100	591	11.1	20	0.37	3.7
Zeitoun	48,200	528	10.9	24	0.49	4.5
Abbassia	101,100	721	7.1	23	0.22	3.1
Ezbekia	61,500	532	8.6	15	0.24	2.7
Rod-el-Farag	142,400	902	6.3	22	0.15	2.4
Shoubra	106,200	974	9.1	37	0.25	3.7
Sharabia	44,100	678	15.3	10	0.22	1.4
Gamalia	88,900	729	8.2	10	0.11	1.3
Bab-el-Shaaria	104,200	652	6.3	20	0.19	3.0
Abdine	81,300	414	5.1	14	0.17	3.3
Mouski	43,100	219	5.1	2	0.07	0.9
Darb-el-Ahmar	89,300	669	7.4	17	0.19	2.5
Khalifa	85,100	558	6.5	12	0.14	2.1
Sayeda I	76,300	496	6.4	14	0.18	2.9
Sayeda II	72,300	354	4.8	10	0.13	2.8
Boulac I	51,000	560	10.9	23	0.45	4.1
Boulac II	59,200	267	4.5	14	0.23	5.2
Adawia	48,400	319	6.3	14	0.28	4.4
Old Cairo	64,800	835	12.1	25	0.38	3.0
Helwan	31,800	252	7.8	13	0.40	5.5
Maadi	37,700	189	5.0	7	0.18	3.9
TOTAL FOR CAIRO	1,533,900	11,903	7.747	351	0.228	2.9

TABLE NO. 137.— CEREBRO-SPINAL FEVER CASES AND DEATHS IN CAIRO DISTRICTS 1946

District	Mid year Population	Number of Cases	Case-rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates per cent
Kubba	43,900	4	0.095	3	0.068	75
Heliopolis	53,100	—	—	—	—	—
Zeitoun	48,200	3	0.062	1	0.021	33
Abbassia	101,100	4	0.036	3	0.029	75
Ezbekia	61,500	1	0.016	1	0.016	100
Rod-el-Farag	142,400	4	0.028	1	0.007	25
Shubra	106,200	1	0.009	—	—	—
Sharabia	44,100	1	0.023	—	—	—
Gamalia	88,900	2	0.022	...	—	—
Bab-el-Shaaria	104,200	2	0.019	2	0.019	100
Abdine	81,300	1	0.012	1	0.012	100
Mouski	43,100	2	0.046	1	0.023	50
Darb-el-Ahmar	89,300	2	0.022	2	0.022	100
Khalifa	85,100	2	0.013	2	0.013	100
Sayeda I	76,300	1	0.013	1	0.013	100
Sayeda II	72,300	3	0.033	3	0.033	100
Boulac I	51,000	4	0.078	3	0.058	75
Boulac II	59,200	1	0.017	—	—	—
Adawia	48,400	2	0.041	2	0.041	100
Old Cairo	64,800	4	0.061	2	0.031	50
Helwan	31,800	—	—	—	—	—
Maadi	37,000	1	0.027	—	—	—
TOTAL FOR CAIRO	1,533,900	45	0.029	28	0.018	62

TABLE NO. 138.— SCARLET FEVER CASES AND DEATHS IN CAIRO DISTRICTS IN 1946

District	Mid-year Population	Number of Cases	Case-rates per 1000 of Population	Number of Deaths	Death-rates per 1000 of Population	Case mortality rates per cent
Kubba	43,900	—	—	—	—	—
Heliopolis	53,100	1	—	—	—	—
Zeitoun	48,200	—	0.01	—	—	—
Abbassia	101,100	—	—	—	—	—
Ezbekia	61,500	1	0.02	—	—	—
Rod el Farag	124,400	—	—	—	—	—
Shoubra	106,200	—	—	—	—	—
Sharabia	44,100	—	—	—	—	—
Gamalia	88,900	—	—	—	—	—
Bab el Shaaria	104,200	1	0.009	—	—	—
Abdine	82,300	—	—	—	—	—
Mouski	43,100	—	—	—	—	—
Darb el Ahmar	89,300	—	—	—	—	—
Khalifa	85,100	—	—	—	—	—
Sayeda I	79,300	—	—	—	—	—
Sayeda II	72,300	—	—	—	—	—
Boulac I	52,000	—	—	—	—	—
Boulac II	59,200	—	—	—	—	—
Adawia	43,400	—	—	—	—	—
Old Cairo	64,800	—	—	—	—	—
Helwan	31,800	—	—	—	—	—
Maadi	37,770	—	—	—	—	—
TOTAL FOR CAIRO	1,533,900	3	0.002	—	—	—

Abbassia Fever Hospital

The number of patients admitted to the Hospital during the last three years (persons accompanying patients included) was :—

1944	...	...	...	...	...	...	...	...	...	...	...	12,517
1945	...	...	...	...	...	...	...	...	...	...	...	14,115
1946	...	...	...	...	...	...	...	...	...	...	...	21,978

The number of patients admitted during 1946 was 19,699. Of these 984 died or a ratio of 4·9 per cent. 2,279 persons accompanied patients.

The following tables give details of the infectious diseases cases isolated.

TABLE No. 139.—GOVERNMENT FEVER HOSPITAL, ABBASSIA.

Diseases	1945		1946								C. arriving on their own account			
	Cases admitted		Cases admitted		Cases admitted within 3 days		Cases admitted within 4-7 days		Cases admitted after 7 days			O. sent by Health Offices	Cases sent by Hospitals	Cases sent by Private Practi- tioners
	Adm.	D.	Adm.	D.	Adm.	D.	Adm.	D.						
Typhus	965	222	103	30	17	7	46	12	40	15	25	23		
Small-pox	155	33	11	1	5	—	3	11	1	3	5	—		
Plague	—	—	—	—	—	—	—	—	—	—	—	—		
Typhoid	1,228	135	1,218	169	200	26	408	49	610	128	396	419		
Para Typhoid	466	36	397	23	71	5	104	4	222	53	105	137		
Diphtheria	655	235	388	145	246	75	112	55	30	83	132	109		
Pneumonia	437	84	667	74	215	25	305	32	147	148	136	144		
Influenza	1,921	—	3,441	—	1,747	—	1,216	—	478	527	431	894		
Measles	75	3	313	20	149	8	117	7	47	93	72	42		
Scarlet Fever	1	—	3	1	1	—	2	1	—	1	1	1		
Chicken-Pox	20	—	74	—	53	—	19	—	2	9	13	5		
Cerebro-Spinal Fever	20	14	19	12	11	6	5	4	3	4	9	3		
Whooping Cough	33	1	18	—	5	—	6	—	7	9	2	4		
Tetanus	39	19	27	17	9	7	13	8	5	7	14	2		
Puerperal Fever	32	8	31	4	12	1	15	2	4	11	9	4		
Dysentery { A....	—	—	38	5	7	—	15	1	19	9	3	7		
{ B....	—	—	111	—	—	—	1	—	—	—	—	—		
Relapsing Fever	1,191	18	8,145	159	—	—	—	—	—	1,921	935	2,465		
Erysipelae	260	99	146	6	—	—	43	2	36	63	32	5		
Other Diseases	4,396	319	4,159	318	—	—	—	—	—	998	665	1,326		
TOTAL	11,894	1,106	19,699	984	2,829	163	2,432	188	1,647	4,080	2,973	5,598		

TABLE No. 140.— RELAPSING

AGE	MALE				FEMALE				TOTAL				BLOOD			
	N. of C.	No. of D.	%		No. of C.	No. of D.	%		No. of C.	No. of D.	%		Neg.	Pos.	% Neg.	% Pos.
Less than 2 years	70	4	5.7	—	34	2	5.9	—	104	6	5.7	—	55	49	52.89	47.11
2— 5 „	174	3	1.7	—	111	4	3.6	—	285	7	2.5	—	164	121	51.2	42.8
5—10 „	227	3	1.3	—	228	3	1.3	—	455	6	1.32	—	227	228	49.8	50.11
10—15 „	663	9	1.3	—	260	3	1.1	—	123	12	1.3	—	376	547	40.7	59.3
15—25 „	2609	30	1.1	—	656	10	1.5	—	3265	40	1.1	—	1,076	2,189	32.9	67.1
25—35 „	1332	35	2.6	—	611	7	1.2	—	1949	42	2.2	—	708	1,241	36.3	63.7
35—45 „	520	20	3.8	—	242	2	.82	—	162	22	2.8	—	300	462	38	62
45—65 „	251	15	5.9	—	114	7	6.2	—	365	22	6	—	138	227	37.8	62.2
More than 65 years	31	2	6.5	—	6	—	—	—	31	2	5.4	—	17	20	46	54
TOTAL... ..	5877	121	2.1	—	2268	38	1.7	—	8145	159	1.95	—	3061	5081	37.58	62.47

Mapharside one injection							Mapharside two injections						
Cases	1 Rel.	%	2 Rel.	%	3 Rel.	%	Cases	1 Rel.	%	2 Rel.	%	3 Rel.	%
1	—	—	1	100	—	—	—	—	—	—	—	—	—
3	—	—	—	—	—	—	5	4	80	—	—	—	—
6	—	—	—	—	—	—	18	3	17	—	—	—	—
8	1	12.5	2	25	—	—	28	4	14.3	—	—	—	—
41	5	12.2	2	4.9	—	—	75	11	14.9	—	—	—	—
20	4	20	—	—	—	—	35	1	2.9	—	—	—	—
8	1	12.5	1	12.5	—	—	18	—	—	—	—	—	—
5	1	20	—	—	—	—	8	—	—	—	—	—	—
1	—	—	—	—	—	—	—	—	—	—	—	—	—
93	12	12.9	6	6.45	—	—	187	23	12.3	—	—	—	—

FEVER RETURN FOR 1946

1. N. A. B.							2. N. A. B.							3. N. A. B.						
Cases	1 Relapse	%	2 Rel.	%	3 Rel.	o/o	Cases	1 Rel.	%	2 Rel.	%	3. Rel.	%	Cases	Rel.	o/o	2 Rel.	%	3 Rel.	%
12	5	41.7	1	8.3	—	—	3	—	—	—	—	—	—	2	1	50	—	—	—	—
60	11	18.3	2	3.5	—	—	5	2	40	—	—	—	—	1	—	—	—	—	—	—
107	25	23	1	91	—	—	34	5	15	—	—	—	—	24	—	—	—	—	—	—
164	36	21.3	1	.69	—	—	237	20	0.84	1	0.13	—	—	119	5	4.3	—	—	—	—
465	97	20.8	12	2.6	—	—	988	65	6.6	4	4	—	2.1	50	5	10	—	—	—	—
430	110	25.6	1	2	—	—	494	36	7.3	—	—	—	—	22	1	4.5	—	—	—	—
165	31	20	2	1.2	—	—	245	15	6.8	1	.40	—	—	5	—	—	—	—	—	—
58	18	31	—	—	—	—	105	7	6.6	—	—	—	—	2	—	—	—	—	—	—
7	2	28.5	—	—	—	—	16	—	—	—	—	—	—	—	—	—	—	—	—	—
1450	335	23	20	1.37	—	—	227	150	7.6	6	.3	—	.46	223	12	5.3	—	—	—	—

Mapharside three injections							No injection at all							N. A. B injection in the apyrex		
Cases	1 Rel.	%	2 Rel.	%	3 Rel.	%	Cases	1 Rel.	%	2 Rel.	%	3 Rel.	%	Cases	Rel.	o/o
—	—	50	—	—	—	—	86	45	52.2	6	7.2	1	1.61	—	—	—
2	1	—	—	—	—	—	209	105	50.2	6	2.8	—	—	—	—	—
5	—	—	—	—	—	—	227	158	57	14	5	2	7	6	3	50
9	—	—	—	—	—	—	439	300	63.7	18	4.1	4	0.91	14	1	1.1
51	6	11.8	—	—	—	—	1465	947	64.6	70	4.8	2	13	63	14	22.2
22	—	—	—	—	—	—	870	535	61.5	24	2.8	2	0.5	28	3	10
9	—	—	—	—	—	—	287	145	50.5	12	4.1	—	—	18	4	7.22
4	—	—	—	—	—	—	173	90	52	5	3	—	—	7	2	285
—	—	—	—	—	—	—	11	4	36.3	—	—	—	—	—	—	—
102	7	6.8	—	—	—	—	3,817	2329	61.1	155	4.1	11	0.3	136	27	198

TABLE NO. 141.—SHOWS INFLUENZA CASES ADMITTED IN 1946

Total Admitted		Cases Admitted within 3 days		Cases Admitted within 4-7 days		Cases Admitted After 7 days		Cases sent by health offices	Cases Sent by Hospital	Cases Sent by Private Practitioners	Cases Admitted at their request
Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Cases	Cases	Cases
3,441	—	1,747	—	1,216	—	478	—	1,589	527	431	894

TABLE NO. 142.—SHOWS AGE AND SEX DISTRIBUTION OF TYPHOID CASES AND THEIR MORTALITY RATES

AGE	MALE			FEMALE			TOTAL			No. of samples		Took 2 inj. at least 1 month earlier		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of cases	No. of Deaths	Mortality Rate	Pos.	Neg.	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%					%
Less than 1 year	9	1	11	3	1	33.3	12	2	16.6	5	7	1	—	—
1-2 years	16	3	18.8	12	2	16.6	28	5	17.9	18	10	—	—	—
2-5 „	84	12	14.3	75	11	14.6	159	23	15.4	111	48	5	—	—
5-10 „	92	12	15.3	51	7	13.8	143	19	13.3	103	40	9	—	—
10-15 „	103	13	12.6	67	10	14.4	170	23	13.5	122	48	15	—	—
15-25 „	242	29	11	125	19	15.4	365	48	13.1	262	103	58	3	5.17
25-35 „	163	15	9.2	65	11	16	228	26	11.4	174	54	28	2	7.1
35-45 „	52	8	15.4	29	5	19.2	78	13	16.6	59	19	8	1	12.5
45-65 „	24	7	29.16	10	3	30	54	10	29.4	25	11	5	—	—
More than 65 „	1	—	—	—	—	—	1	—	—	—	—	—	—	—
TOTAL ...	786	100	12.7	432	69	15.9	1,218	169	13.87	877	341	129	6	4.6

TABLE NO. 143.— SHOWS AGE AND SEX DISTRIBUTION OF PARA-TYPHOID CASES AND THEIR MORTALITY RATES

Age,	MALE			FEMALE			TOTAL			Samples of W.		Took 3 inj. before one month		
	No. of C.	No. of D.	%	No. of C.	No. of D.	%	No. of C.	No. of D.	%	Pos.	Neg.	Cases	Deaths	%
Less than 1 year ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- 2 years ...	2	—	—	3	—	—	5	—	—	4	1	—	—	—
2- 5 „ ...	12	—	—	7	—	—	19	—	—	17	2	—	—	—
5-10 „ ...	15	—	—	15	2	3.3	30	2	6.6	28	2	3	—	—
10-15 „ ...	36	1	2.8	27	—	—	63	1	1.6	57	6	11	—	—
15-25 „ ...	121	5	4.3	38	4	10.5	159	9	5.1	142	17	33	1	3.0
25-35 „ ...	57	3	5.3	16	—	—	73	3	4.1	70	3	10	—	—
35-45 „ ...	23	3	1.3	8	1	12.5	31	4	12.9	28	3	4	—	—
45-65 „ ...	14	3	21.4	3	1	33.3	17	4	23.5	15	—	4	—	—
More than 65 years ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	280	15	5.4	117	8	6.9	397	23	5.8	367	36	65	1	1.5

TABLE No. 144.—Shows Age and Sex Distribution of Diphtheria Cases and their Mortality Rates.

Age	Male			Female			Total			Swab		Took 3 inj. before one month		
	No. of C.	No. of D.	%	No. of C.	No. of D.	%	No. of C.	No. of D.	%	Pos.	Neg.	No. of C.	No. of D.	%
Less than 1 year	25	12	48	29	9	31	54	21	38.8	37	17	—	—	—
1- 2 years... ..	41	20	48.1	25	13	52	66	33	50	35	31	12	2	16.7
2- 5 „	91	32	35.1	57	22	38.5	148	54	36.5	75	73	32	—	—
5-10 „	28	15	53.5	26	7	26.9	54	22	40.1	43	13	11	—	—
10-15 „	22	8	36.5	6	3	50	28	11	39	16	12	6	—	—
15-25 „	16	3	18.8	11	1	9	21	4	14.8	17	10	5	—	—
25-35 „	4	—	—	3	—	—	7	—	—	2	5	—	—	—
35-45 „	2	—	—	1	—	—	3	—	—	1	2	—	—	—
45-65 „	—	—	—	—	—	—	—	—	—	—	—	—	—	—
More than 65 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	229	90	39	158	55	35	388	145	37.2	224	164	66	2	31.6

TABLE No. 145.—AGE AND SEX DISTRIBUTION OF PNEUMONIA CASES AND THEIR MORTALITY RATES.

Age	Male			Female			Total			Lobar PN.	Broncho PN.
	No. of Cases	No. of Deaths	Rate per cent	No. of Cases	No. of Deaths	Rate per cent	No. of Cases	No. of Deaths	Rate per cent		
			%			%					
Less than 1 year.	12	2	16.66	7	1	14.3	19	3	15.8	8	11
1- 2 years	29	4	13.8	16	2	12.5	45	6	13.3	20	25
2- 5 „	38	7	18.4	17	3	17.6	55	10	18	17	38
5-10 „	35	5	14.3	19	2	10.5	54	7	13	24	30
10-15 „	46	3	6.5	27	4	14.8	73	7	9.6	32	41
15-25 „	113	11	9.7	36	3	8.33	149	14	9.3	72	77
25-35 „	86	4	4.65	43	8	18.6	129	12	9.3	39	90
35-45 „	68	2	3	38	6	15.8	106	8	7.5	47	59
45-65 „	24	4	16.7	12	3	25	36	7	19.4	14	22
More than 65 years	1	—	—	—	—	—	1	—	—	1	—
TOTAL	452	42	9.5	215	32	14.9	667	74	11.2	274	393

TABLE No. 146.—SHOWS AGE AND SEX DISTRIBUTION OF TYPHUS CASES AND THEIR MORTALITY RATES

AGE	MALE			FEMALE			TOTAL			No. of W.F. samples		Took 3 inj. before one month		
	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	No. of Cases	No. of Deaths	Mortality Rate	Pos.	Neg.	No. of Cases	No. of Deaths	Mortality Rate
			%			%			%					%
Less than 1 year	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- 2 years ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2- 5 „ ...	—	—	—	1	—	—	1	—	—	—	1	—	—	—
5-10 „ ...	1	—	—	1	—	—	2	—	—	2	—	—	—	—
10-15 „ ...	5	3	60	6	2	33	11	5	45.5	5	6	—	—	—
15-25 „ ...	18	2	11.1	12	6	50	30	8	26.7	14	16	3	—	—
25-35 „ ...	13	4	30.8	13	3	23	26	7	26.9	12	14	5	—	—
35-45 „ ...	13	3	3.2	1	—	—	14	3	21.4	5	9	1	—	—
45-65 „ ...	14	6	4.2	4	—	—	18	6	53.3	8	10	—	—	—
More than 65 years	1	1	100	—	—	—	1	1	100	—	1	—	—	—
TOTAL	65	19	29.2	38	11	28.9	103	30	29.12	46	57	9	—	—

TABLE No. 147.—SHOWS AGE AND SEX DISTRIBUTION OF SMALL-BOX CASES AND THEIR MORTALITY RATES

AGE	MALE			FEMALE			TOTAL			Not Vaccinated in Infancy			Vaccinated one year ago			Vaccinated 1-3 years ago		
	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%
Less than 1 year	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- 2 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2- 5 "	—	—	—	1	—	—	1	—	—	1	—	—	—	—	—	—	—	—
5-10 "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10-15 "	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	1	—	—
15-25 "	6	—	—	—	—	—	6	—	—	2	—	—	4	—	—	—	—	—
25-35 "	1	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—
35-45 "	2	1	50	—	—	—	2	1	50	1	1	100	—	—	—	1	—	—
45-65 "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
More than 65 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	9	1	11	2	—	—	11	1	9.1	4	1	25	5	—	—	2	—	—

TABLE No. 148.—SHOWS AGE AND SEX DISTRIBUTION OF ERYSIPELAS CASES
AND THEIR MORTALITY RATES

Age	Male			Female			Total			Treatment Serum & Sulph. Comp.			Treat.withSulpha- nilamide alone		
	No. of C.	No. of D.	%	No. of C.	No. of D.	%	No. of C.	No. of D.	%	No. of C.	No. of D.	%	No. of C.	No. of D.	%
Less than 1 year ...	—	—	—	1	1	100	1	1	100	1	1	100	—	—	—
1- 2 years	1	—	—	—	—	—	1	—	—	1	—	—	—	—	—
2- 5 ,,	3	—	—	—	—	—	3	—	—	3	—	—	—	—	—
5-10 ,,	5	—	—	3	—	—	8	—	—	8	—	—	—	—	—
10-15 ,,	12	—	—	6	—	—	18	—	—	18	—	—	—	—	—
15-25 ,,	23	1	4.3	11	—	—	34	1	2.9	34	1	2.9	—	—	—
25-35 ,,	16	1	6.2	9	—	—	25	1	4	23	1	4.3	2	—	—
35-45 ,,	24	2	8.3	13	1	7.7	37	3	8.1	36	2	5.5	1	1	100
45-65 ,,	11	—	—	5	—	—	16	—	—	14	—	—	2	—	—
More than 65 years	3	—	—	—	—	—	3	—	—	3	—	—	—	—	—
TOTAL ...	98	4	4.1	48	2	4.1	146	6	4.1	141	5	3.5	5	1	20

TABLE No. 149.—SHOWS AGE AND SEX DISTRIBUTION OF CEREBRO-SPINAL FEVER
CASES AND THEIR MORTALITY RATES

AGE	MALE			FEMALE			TOTAL			Samples of C.S.F.		Swabs from Throat	
	No. of C.	No. of D.	%	No. of C.	No. of D.	%	No. of C.	No. of D.	%	Pos.	Neg.	Pos.	Neg.
Less than 1 year	—	—	—	—	—	—	—	—	—	—	—	—	—
1- 2 years	2	2	100	—	—	—	2	2	100	2	—	—	—
2- 5 ,,	2	—	—	—	—	—	2	—	—	1	1	—	—
5-10 ,,	1	—	—	1	—	—	2	—	—	1	1	—	—
10-15 ,,	1	1	100	1	—	—	2	1	50	1	1	—	1
15-25 ,,	—	—	—	—	—	—	—	—	—	—	—	—	—
25-35 ,,	—	—	—	1	—	—	1	—	—	—	—	—	—
35-45 ,,	2	2	100	2	2	100	4	4	100	2	2	—	—
45-65 ,,	4	3	75	2	2	100	6	5	83.3	4	4	—	—
More than 65 years	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	12	8	66.6	7	4	57.1	19	12	63.1	2	9	—	1

PASSENGER CONTROL

Passengers.

During 1946 there were 27,562 passengers who arrived from infected countries, as compared with 23,409 in 1945. Out of the total, 7,068 passengers arrived by air, 1,265 passengers arrived by car via Ismailia, 1,180 arrived via Suez, 6,518 passengers arrived via Kantara, 2,608 passengers arrived by sea via Alexandria and 428 passengers via Port Said.

Moreover 8,495 passengers arriving from the Sudan through Shellal were observed for small-pox, meningitis and yellow fever. All the passengers, with the exception of 366 who could not be traced and two died, were observed for the regulation period, giving a percentage of 98·7 observed.

Pilgrims.

The number of Egyptian pilgrims arriving from the Hedjaz was 6,221 as compared with 3,287 in the previous year.

All the returning pilgrims underwent the regulation period of observation and were found in good health.

Of the 6,231 pilgrims who left for the Hedjaz,⁷ pilgrims did not return and 3 pilgrims died.

Officials and employees of Tor mission numbering 52 were observed and found in good health.

SANITARY CONTROL OF PUBLIC WOMEN

The total number of registered prostitutes for the year 1946 was 509, as compared with 551 in 1945. 48 were struck off the register during the year.

'The total number of examinations held was 22,871. 140 prostitutes were found suffering from venereal diseases, distributed as follows:—

Chronic Gonorrhoea	...	...	...	...	...	...	...	...	76
Primary Syphilis	...	...	...	...	...	...	...	...	3
Secondary Syphilis	...	...	...	...	...	...	...	...	48
Soft chancre	...	...	...	...	...	...	...	...	8
Scabies	...	...	...	...	...	...	...	...	5
TOTAL									140

The number of arrested women was 271 compared with 1,139 in the year 1945. The incidence of disease amongst them was as follows:—

Chronic Gonorrhoea	...	...	...	...	...	...	...	...	54
Primary Syphilis	...	...	...	...	...	...	...	...	7
Secondary Syphilis	...	...	...	...	...	...	...	...	87
Soft chancre	...	...	...	...	...	...	...	...	1
Scabies	...	...	...	...	...	...	...	...	3
TOTAL									152

Wassermann Examination of the Blood:—

Prostitutes : 46 were found positive among 460.

Arrested women: 87 were found positive among 271 .

Complaints against Prostitutes.

12 complaints were received. All proved to be false.

POLICE HEALTH OFFICE

The strength of Cairo Police was estimated at 11,455 men in 1946. The following is a short description of the work carried out by this office during the year.

MEDICAL WORK

Policemen examined for sick leaves	... ..	780
Other police employees examined for sick leaves	... ..	1,052
Medico legal reports	... ..	23,174
Persons stung by scorpion and given 1st aid injections	... ..	596
Applicants for licences of Car and Cab drivers examined	... ..	5,891
Candidates for police posts examined	... ..	1,303

SANITARY WORK

Number of inspections of police units	... ..	292
Number of personnel vaccinated against small pox	... ..	1,596
Number of personnel vaccinated against typhoid (two injections)	... ..	6,765

It was observed that the most prevalent diseases among non-commissioned officers were : sores, wounds, rheumatism, and renal colic. The number of cases of these diseases were 1,047, 809,794 and 749 respectively.

The most prevalent diseases among officers and civilians were: bronchitis, rheumatism, enteritis, and general debility. The number of cases of these diseases were : 256,147,118 and 90 respectively.

16 members of the police force were sent to the fever hospital suffering from typhoid and para-typhoid.

964 Persons were put under observation for infectious diseases during the year.

Unhealthy Inconvenient, and Dangerous Establishments.

Under Law No. 13 of 1904 and Ministrial Arrêté dated August 29,1904, the following unhealthy, inconvenient and dangerous establishments were licensed during the year 1946

	1st Class	2nd Class	3rd Class
Saha	155	825	457
Zabt	162	206	50
Total	317	1030	507
Grand Total. 1844			

The number of establishments inspected this year was 20,120 of which 16,314 complied with sanitary conditions.

2,912 P.Vs. were drawn up during the year against owners of unlicensed establishments, and 2,357 against owners of licensed establishments lacking sanitary conditions. This makes a total of 5,269 P.Vs.

Under Law No. 1 of 1904 substituted by Law No. 38 of 1941, 104 theatres, cinemas and other establishments were inspected during the year 1946.

SANITATION SECTION

The activities of the sanitation section during the year 1946 can be summarised as follows :—

(1) Samples of water have been regularly taken from the different main water supplies at Gîza, and Helwan in order to ensure the good quality of the water. Also samples of water have been taken regularly from taps in different parts of the City and swimming baths.

(2) Five free water taps have been erected.

(3) Five slope water gulleys have been erected for disposal of waste water.

(4) The department has approved the sanitary water systems of ten private new buildings at Helwan.

(3) 3,000 complaints were received and dealt with during the year regarding cleanliness of houses and waste lands.

(6) Vidange : 3,550 permits were given for evacuation of private cisterns.

(7) Overseers were appointed to control refuse dumps and those of sewage matter.

(8) A liaison officer was appointed between this department and the Tanzim Department.

(9) All sanitary repairs needed for houses are now dealt with by the Malaria Section,

Flour and flour prep rations e.g. bread Confectionery (miscellaneous) and Jam...	19,929 9,215	—	—	—	—	1,714 3,219	294 38	152 32	33 6	109	—	11.2 15.8	37
Sugar	—	—	—	—	—	—	4	4	—	—	—	—	—
Milk	43	—	—	—	—	1 }	8,663 5	7,696 4	967	1	—	11.2	20
Sour milk	—	—	—	—	—	—	156	149	7	—	—	4.5	—
Butter	—	—	—	—	—	—	132	118	7	7	—	5.3	5.3
Vanilline and baking powder	—	—	—	—	—	—	21	12	9	—	—	42.8	—
Cheese.	160	—	—	—	—	1,438	245	238	5	2	—	2	0.8
Masli, natural and artificial	—	—	—	—	—	200	685	618	4	63	—	0.6	9.2
Eggs	35,115	—	—	—	—	—	—	—	—	—	—	—	—
Halawa	—	—	—	—	—	—	32	32	—	—	—	—	—
Tea	—	—	—	—	—	—	52	46	6	—	—	11.5	—
Coffee	—	—	—	—	—	—	342	336	5	1	—	1.5	0.3
Cocoa	—	—	—	—	—	934	37	33	—	4	—	—	10.8
Vinegar	—	2	—	—	—	—	186	139	47	—	—	25.3	—
Mineral waters	—	—	—	—	—	—	75	74	—	1	—	—	1.3
Alcoholic liquors	—	—	—	—	—	—	621	516	—	105	—	—	16.9
Syrups and ice-cream	—	32	—	—	—	—	121	99	21	1	—	17.3	0.8
Honey	—	—	—	—	—	1,234	50	27	—	23	—	—	46
Dried foodstuffs, etc.	—	—	—	—	—	37	70	62	1	7	—	1.4	10
Condiments	—	—	—	—	—	581	31	25	—	6	—	—	19.3
Colouring matters	—	—	—	—	—	—	354	326	27	—	—	7.6	0.3
Formaline and Borax	—	—	—	—	—	—	33	25	8	—	—	24.2	—
Utensils unfit for use	774	—	—	—	—	—	4	4	—	—	—	—	—
Healthy Pills	—	—	—	—	—	—	—	—	—	—	—	—	—
Tins and utensils	—	—	—	—	—	—	2	2	—	—	—	—	—
	—	—	—	—	—	—	10	10	—	—	—	—	—

Samples sent
Bacteriological
Test.

The destroyed masli
and oils are com-
bined together in
this table but the
specimens are tak-
en only from the
masli.

The destroyed cocoa.
and tea are com-
bined together in
this table but the
specimens are ta-
ken only from
the cocoa.

Chemical analysis.
Bacteriological
Exam.

TABLE NO. 151—SHOWING NUMBER OF SAMPLES OF MILK TAKEN DURING 1946 AND THE RATE OF ADULTERATION THEREOF :—

Number of Samples	Adulterated Samples						Total number of adult. samples	Number of genuine samples	Percentage of adulteration
	Skimmed Samples	Samples to which water was added		Samples skimmed and to which water was added					
	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.			
8,663	729	8.4 %	139	1.6 %	99	1.1 %	967	7,696	11.2 %

N.B. — In addition to that 5 samples were taken and sent for bacteriological test; the result was as follows :
4 genuine and 1 decomposed.

TABLE NO.152—SHOWING LIST OF CONTRAVENTIONS DRAWN UP DURING THE YEAR 1946
UNDER THE FOLLOWING ACTS

No. of Procès-Verbaux drawn up in accordance with the Law No. 48 of 1941 <i>re</i> Fraud and Adulteration	No. of Procès-Verbaux drawn up in accordance with Law No.73 of 1943 <i>re</i> Itinernat Vendors.	No. of Procès-Verbaux drawn up against milk vendors under Arrêté of Ministry of Interior dated 18.5.1925	No. of Procès-Verbaux drawn up in accordance with Arrêté of Cairo Governorate dated 27.3.911 <i>re</i> Markets	No. of Procès-Verbaux drawn up in accordance with Arrêté 275 dated 6.10.1945 <i>re</i> Alcoholic Liquors	Procès-Verbaux drawn up in accordance with order 386-Law 108 of 1945 <i>re</i> , Refuse	Procès Verbaux drawn up in accordance with order 281 under Law 108 1945 <i>re</i> . Ice-Creams	Procès Verbaux drawn up under Law No.5 of 1941 <i>re</i> Practice of Pharmacy without Licence	Procès Verbaux drawn under Law dated 5.5.1946 <i>re</i> Colouring Matter
1,201	4,290	54	362	34	34	24	1	1

Number of Milk vendors who were licensed.	339
„ of ambulant vendors who were licensed.	197
„ of cases of food poisoning.	400
„ of complaints received by the Section and dealt with.	529

Printed at the Government Press, Calro,
Director.
HASSAN ALI KLEWA.

